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CONTENTS

IN MEMORIAM 42

BROTHER BEN MILLER GOES TO WASHINGTON 43

THE CONTRIBUTION OF PHYSICAL EDUCATION TO THE WAR EFFORT AND THE LIFE AFTER THE WAR *A. A. Esslinger* 44

HOW'S THE BALANCE? *John Scannell* 51

IMPLICATIONS OF THE PHYSICAL FITNESS PROGRAM FOR PUBLIC SCHOOL PHYSICAL EDUCATION *William L. Hughes* 52

A NATIONAL PHYSICAL FITNESS PROGRAM FOR THE ADMINISTRATOR OF HEALTH AND PHYSICAL EDUCATION IN PUBLIC SCHOOLS *Louis R. Burnett* 54

INCREASED RESPONSIBILITIES IN DEVELOPING AND CONSERVING HEALTH IN WAR TIME *Felix J. Underwood* 57

THE PENDULUM SWINGS FORWARD *Myrtle E. Lee* 59

SAFETY SLANTS ON SLATS *Lieut. (JG) Vincent Farrell* 62

I THREW THEM IN THE WASTE BASKET *H. Alvin Brown* 63

WHAT DETERMINES THE POSSIBLE ENERGY OUTPUT OF AN INDIVIDUAL? *Arno P. Wittich* 64

HUMISTON MOTOR ABILITY TEST AS ADMINISTERED TO UNIVERSITY SCHOOL GIRLS *Julia Elizabeth Hanifen* 66

THE TRAINING, TEACHING LOAD, AND EXTRA CURRICULAR DUTIES OF MEN TEACHERS OF PHYSICAL EDUCATION IN ILLINOIS *C. O. Jackson and D. C. Kienlen* 67

COMPARATIVE TEST SCORES OF 50 TRACK AND FIELD CANDIDATES AND 50 ASTP STUDENTS ENROLLED IN THE REQUIRED PHYSICAL EDUCATION PROGRAM AT PURDUE UNIVERSITY *Hermon Phillips and Homer Allen* 68

INDIANA PHYSICAL FITNESS TEST *Frank Stafford, Ch.* 70

GUIDANCE AND ADJUSTMENT IN THE SUMMER CAMP *Nicholas Schreiber* 74

LEADERSHIP *Maj. C. A. Bach* 77

BOOK REVIEWS 79

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IN MEMORIAM

EMIL RATH—1873-1943

On October 21, Brother Emil Rath, Director of Physical Education in the Indianapolis Public Schools and a life member of Phi Epsilon Kappa Fraternity died after a brief illness following a heart attack. He was recognized and admired by all who knew him as a teacher of teachers, as a scholar, as an author and as a dynamic leader in our profession. He possessed a strong, wholesome personality, exceptionally high ideals, an unwavering belief in the importance of Physical Education and a consistancy of purpose in promoting the aims and objectives of our profession.

Brother Rath came to the United States with his parents from Germany at the age of nine. He delighted in attending the Pittsburg Turner classes and at the age of twenty won first place in heavy apparatus at the national meet of the American Turners. He graduated from the Normal College A. G. U. in 1898 and taught in the Pittsburg Public Schools and Turner Society for the next eleven years. In 1908 he directed the American Turners' gymnastic team in the international gymnastic meet at Frankfurt, Germany and the next year he was appointed President of the Normal College A. G. U. and Dean of the Department of Physical Education. Again in 1928 he directed the American Turners' Gymnastic Team in the International Gymnastic Meet at Cologne, Germany. After 25 years as President of the Normal College A. G. U., now of Indiana University, he resigned in 1934 to accept the position of Director of Health and Physical Education in the Public Schools of Indianapolis, Ind.

The greatest contribution Brother Rath made toward the development of physical education in the United States was as a teacher of teachers. He was a keen analyst of calisthenics, rhythmic and gymnastic activities. He was also a perfectionist and expected his pupils to be the same. He excelled as a teacher of teachers because in all of his classes he taught his pupils how to analyze a movement, the physical and organic values of its accurate execution and the best methods of teaching a class so that its members would secure the greatest physical and organic benefits from the activity. He never wavered in his firm belief that our primary aim in physical education was to develop organic power and neuromuscular skills. He understood the value of athletics and the importance of character development through physical activities. Due, however, to the short time allotment for public school classes and the adverse facilities available he was convinced that grade and junior high school pupils would benefit more through well selected and accurately taught calisthenics and rhythmics. We who knew him well are happy to know that he lived long enough to have the armed forces prove the truth of his convictions.

As a scholar, Brother Rath was a profound thinker and a prolific reader of physical education literature. He was never static in his thinking and was always on the alert for new ideas. He was constantly experimenting with new ideas in an attempt to improve methods and procedures to secure optimum results.

As an author he published books on calisthenics, gymnastic dancing, apparatus work, folk dancing and aesthetic dancing. He also wrote many articles which were published in Mind and Body and the Journal of Health and Physical Education.

As a professional leader he was president of the Midwest section of the A. H. P. E. & R. in 1932. In the same year he was elected as a Fellow in the American Academy of Physical Education. He also helped organize the Indiana Association of the A. A. H. P. E. & R. and was its first president.

During the nine years he directed physical education in the Public Schools of Indianapolis he made many beneficial changes and wielded a powerful influence. He introduced many athletic skills and testing proceedures which measure the physical improvement of the pupils. Through his influence physical education teachers were hired to actually teach the program of physical education instead of merely supervising it.

The thorough understanding of the principles and problems of physical education and their rational interpretation and application, considering the existing time allotment and facilities available, which he imparted to his pupils, will be carried on. His teachings will cause more emphasis to be placed on the development of muscular strength, organic power, fundamental neuromuscular skills and endurance through well selected conditioning activities and rhythmics in addition to games and athletics. Although his leadership will be greatly missed, the wholesome influence he exerted will continue to live and grow through the men and women Brother Emil Rath inspired.

ALVIN ROMEISER,
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BROTHER BEN MILLER GOES TO WASHINGTON

Editor's Note: Believing in tributes to living persons, we are happy to print the following comments, prepared by Brother W. W. Patty. It is particularly fitting that such a tribute should come to Dr. Miller from a fellow staff member. We all wish Ben continued success in our profession.

Dr. Ben Miller, who has been a member of the Physical Education staff at Indiana University since 1935, has accepted the appointment as National Executive Secretary of the American Association for Health, Physical Education, and Recreation. He reported for duty at the Washington Office December 15. He is succeeding N. P. Nielson, who has resigned in order to accept the position as Director of Athletics and Physical Education at the University of Utah, Salt Lake City.

While Dr. Miller's departure will be a serious professional loss to Indiana University and to the entire program in the State of Indiana, it is a real compliment to the program of Health, Physical Education, and Recreation in the State of Indiana, and to the respect with which the profession is held in the state, as well as the recognition of Dr. Miller's own personal and professional qualities.

Most of "Ben's" career thus far has been in the State of Indiana. He first came into public prominence when he and his identical twin brother, Leonard, carried the basketball team from the little high school team at Walden to the final State Basketball Tournament in Indianapolis. He later enrolled at Indiana University and became a member of the varsity basketball team, on which he was captain during his senior year. He graduated from Indiana University with Phi Beta Kappa scholastic honors in 1931. While teaching he carried on graduate study at Indiana University and qualified for his Master's Degree with a major in Physical and Health Education. Later he matriculated at New York University for work toward his Doctorate Degree. He completed his Ph. D. requirements at New York University in December, 1942. He made his doctorate research with public school teachers, pupils, and Indiana doctors. The title of his thesis is "Critical Analysis of the Effect of the Teacher in Physical Inspection of Public School Children." He is also the author of "Bicycle Safety Tests," published by the National Safety Council in Chicago, Illinois.

His fine personal qualities, his superior scholarship ability, and his well-balanced point of view toward all phases of athletics, Physical Education, Safety Education, and Health Education, have enabled him to make an outstanding professional record in the state during the twelve years since his graduation.

He was employed as teacher of Physical Education and Assistant Critic Supervisor of Physical Education in the Bloomington High School from 1931 to 1935. He was half-time teacher in the Bloomington schools and half-time instructor at Indiana University in 1935-36. In 1936 he became a full-time instructor at Indiana University, specializing in the Physical Examination Corrective work and in Safety Education. Since that time he has received several promotions at Indiana University. When Indiana University started its intensive physical fitness program two years ago, he was given a major responsibility in organizing and managing the daily program of Physical Fitness for men students, working with Mr. Zora Clevenger, who is the official Administrator of Athletics and Physical Education for men students at Indiana University, and with Brother Patty, who is general chairman of the Physical Fitness committee. This program of Physical Fitness for men involved 2,500 civilian men students during much of the time for more than a year. At the time when the number of civilian men students decreased the university took on the responsibility for six hours weekly for 2,000 soldier students. Brother Miller has been in immediate charge of fourteen full-time instructors of Physical Fitness for soldier students during the present year.

In the meantime, Ben has been active in our professional organization. He served on legislative and administrative committees of the state organization and served a term as our state president. He represented us on national and midwest councils and served on special committees. He was president of the Mid-West Association last year and was re-elected for a second term, so far as we know the first precedent where an officer has been asked to serve a second term. He has been serving as a member of the National Executive Committee. His professional contacts in a sectional and national way have brought a wide acquaintance and together with his other work serve as a fine basis for successful service as our National Executive leader.

When the National Executive Committee selected him as the person to whom they wished to offer this outstanding professional position, they were basing their judgment upon his record and many personal contacts with him. This promotion is a fine professional recognition for Brother Miller and also for the State of Indiana. Our association is proud to furnish the full-time National Executive leader for the profession and for the American program.

Dr. and Mrs. Miller and their two fine boys have moved to Washington, D. C. We all wish for them a very pleasant experience in the nation's capital. We certainly all expect and hope for our associate and colleague the best of success in his future professional activities.

THE CONTRIBUTION OF PHYSICAL EDUCATION TO THE WAR EFFORT AND THE LIFE AFTER THE WAR

A. A. ESSLINGER
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For thousands of years the importance of physical education to the war effort of a nation has been recognized. This fact finds expression in the statement, "England's wars have been won on the playfields of Eton." This same thought has been expressed by General Douglas MacArthur, who, while Superintendent at West Point, had inscribed on the historic walls of the entrance hall of the Cadet Gymnasium these words, "On the fields of friendly strife are sown the seeds which, in other years on other fields, will bear the fruits of victory."

The peace-time values of physical education are less well recognized. Physical education is effective in making our manpower fit to fight—but it is also of value in making our manpower fit for living. This fact has not been realized in the democracies where the neglect of physical education during peace was an important factor in the downfall of France and, in addition, has already cost the Allied cause many defeats and countless lives. For the second time in twenty-five years we have discovered that we could not afford to neglect our manpower until an emergency arose.

Physical education has several very important contributions to make toward winning the war and the peace which will follow. Experiences may be provided which lead to the development of (a) physical fitness, (b) motor skills, (c) recreational skills, and (d) democratic citizenship. Each of these will be discussed in turn.

Physical Fitness

Physical education's most important contribution today is that which is made in regard to physical fitness. Physical education shares with the school health program the responsibility for developing physical fitness among our school population. Physical fitness has been defined as, "The nature and degree of adjustment in activities requiring muscular effort."[1] Its constituents are as follows:

1. Freedom from defects.
2. Nutritional status.
3. Muscular strength.
4. Endurance.
5. Neuro-muscular coordination.
6. Agility.

The draft statistics are often given as evidence of the failure of physical education to develop physical fitness among our male population. An examination of the principal causes of rejection exonerates physical education from such accusations. The defects discovered are primarily attributable to ineffective school health education rather than physical education programs.

Are Our Youth Soft? The aspects of physical fitness to which physical education contributes most are strength, endurance, agility, and neuro-muscular coordination. These qualities are better known as the biological objectives of physical education. Because of the machine age in which we live, modern life is almost devoid of opportunities to develop these qualities except through physical education. That this has not been done in recent years is an unfortunate fact. American youth and manhood have been called flabby, weak, and soft. Such accusations are supported by considerable evidence. Numerous studies of secondary school and college students and service men in various branches of our armed forces reveal that a large portion of them are unable to meet even mediocre standards of physical efficiency. Dr. Louis R. Burnett, Director of Physical Education in the Baltimore Public Schools, after over twenty years of experience testing thousands of public school children makes the following statement:

> The Physical achievement tests conducted during the past eight years definitely show that few boys and still fewer girls can lift their weight to climb a fence five feet high or jump across a pit four feet wide. The average records for the pullups, the short dash, the rope climb, or a target throw are considerably lower than those made twenty years ago. Agility as shown by performing simple tumbling exercises is less, posture is poorer, the muscles of the shoulder girdle and arms are flabbier in the average boy.

In a physical fitness test of 1000 men students at the University of Illinois in November, 1940, the following facts were revealed:

130 or 13% could not swim a stroke.
360 or 36% could not swim 50 yards.
31 or 3.1% could not chin one time.
259 or 25.9% could not chin five times.
241 or 24.1% could not clear an obstacle waist high (vault).
417 or 41.7% could not "skin the cat."

Such figures are typical of physical fitness tests made in many other colleges and high schools. For

[1] Larson, Leonard. *Defining Physical Fitness.* Journal of Health and Physical Education, January, 1942. Vol. XIII, No. 1, p. 18.

example, at Stanford nearly 300 freshmen men were tested in the fall of 1941. Some of the outstanding revelations of this test were:

9 or 3% could not chin one time.
53 or 19% could not chin five times.
21 or 7% could not push-up (parallel bars) one time.
141 or 49% could not push-up five times.
32 or 12% could not vault an obstacle waist high.
42 or 15% could not grip 100 with right hand.
60 or 21% could not grip 90 with left hand.
20 or 25% could not swim 50 yards.

While the figures at Stanford are slightly better than those at the University of Illinois, there is every reason why they should be since high school students in Illinois are required to spend only two thirty-five minute periods per week in physical education, while a daily period is required in California. It should be noted, however, that all of the above data were obtained from students who were without physical defects which would bar them from taking the tests. In reality, the above data reveal a *better* picture than actually exists.

If the above data do not convince the skeptical person that a large portion of our youth is physically weak, a vast amount of additional evidence could be produced. For example, thousands of men have been given a physical fitness test upon their enlistment in the Navy. Thirty per cent of these thousands of individuals are unable to meet the minimum strength requirements which are seven chins, ten push-ups, nineteen sit-ups and seventy inches in the broad jump. There is no reason to believe that the Army could produce a better record.

Causes of Physical Weakness of Our Youth. The causes for the lack of physical fitness in the American population are quite obvious. The machine has emancipated man from vigorous muscular activity and our physical education programs have not compensated to a sufficient extent. The Metropolitan Life Statistical Bulletin, "Health Aspects of the Draft" states:

> In civilian life, younger persons as well as older persons have become too dependent on machines. Because of the reduction in the amount of physical labor required in every day work, many young people do not expend as much energy or use the large muscles of the body, either in work or in play, as much as is good for proper health and development.

These facts are further substantiated by a recent survey of the American Institute of Public Opinion: 43 per cent did no walking outside of work and 42 per cent stated they took no systematic exercise of any kind. Roy Helton in the September, 1940 issue of *Harpers Magazine* writes in this connection as follows:

> We are largely a sedentary people. For exercise mature Americans move faster and travel farther under cover and on the seats of their pants than the citizens of any other nation in the world. They spend more time in inclosed rooms than any race that ever survived in all history. The British come next and the French come third. Pre-war Germany with sixty-six million people—the greatest technicians of modern times—had fewer passenger motor cars than the State of Pennsylvania.
>
> We indulge our children illimitably. Instead of rearing a race of lusty, weather-conditioned sons and daughters of democracy, we exhaust our private purses to buy gasoline for our racing youth, and strain the resources of our schools and colleges to erect stadia unparalleled since the days of degenerating Rome. We have carried the spectator sports to an excess never witnessed in life since the days of Augustus. It is true that our younger sons and daughters romp and play like natural human kind, but once in the standard assembly line we have constructed to provide for our future, they must sit out the best Saturday afternoons in the year while twenty-two picked men provide emotion, the sense of achievement, as well as vicarious exercise for twenty-two thousand rooters.
>
> We have constructed motor roads to the tops of our mountains. In our magnificent outdoor training grounds of democracy we have done everything possible to remove any incentive for mature people to use human activity for pleasure. Folk too indolent to climb a seven-foot stepladder can ascend Mt. Mitchell, Mt. Washington, Clingman's Dome or Pike's Peak sitting down.
>
> Any intelligent program for the defense of democracy and the protection of vital natural resources would impose a rising tax on the consumption of gasoline for pleasure that would compel our people to re-examine their feet. Would we ever do that? Is democracy so dear as parental—or self-indulgence? Time alone will tell. Shall we put a weekly twenty mile walk into our school curricula? Shall we ever get our twenty-two thousand spectators into the field and turn our twenty-two gladiators into spectators? If we do not do it ourselves Mars will, rising from within or without.[2]

[2] Quoted by permission Harper Brothers.

Effect of Our Lack of Fitness. Mr. Helton's prediction has come true. Mars has arisen from without and now we are struggling frantically to built up our manpower. But at what a cost! *Our entire war effort has been handicapped because of our lack of physical fitness.* This is particularly true in our military forces where a much greater portion of time than was anticipated is being spent in conditioning the troops. Army and Navy officers have repeatedly stated that their training programs are sadly hampered and delayed because of the physical weakness and softness of this generation of draftees. It is quite likely that the time devoted to basic training in both Army and Navy could be reduced by twenty-five to thirty-five per cent if all entering men were in a state of fair physical condition. We have heard too often since Pearl Harbor that tragic phrase "too little and too late." This refers to manpower as well as materials of war. Along with our needs for rubber, ships and other war essentials, our need for physical fitness is equally great and crucial.

War places a premium upon physical fitness. The Axis nations have realized this and for years previous to this conflict they have been building up their manpower. While American youth were taking physical education in their schools for two thirty-minute periods per week, German youth were required to spend several hours each day. It has been said, "We have been blinded into believing that Hitler was warping youth. . . . Spiritually and politically, yes, . . . Physically, no." The products of Axis aggression are tough, rugged and strong and they are inspired with a fanatic belief in their way of life as opposed to ours. In this connection the following statement by William L. Shirer in his *Berlin Diary* is appropriate:

> Footnote to May 20, 1940. Returning from Brussels to Aschen, we ran across a batch of British prisoners. . . What impressed me most about them was their physique. They were hollow-chested and skinny and round-shouldered. About a third of them had bad eyes and wore glasses. Typical, I concluded of the youth that England neglected so criminally in the twenty-two post-war years when Germany, despite its defeat and the inflation and six million unemployed, was raising its youth in the open air and the sun. . . . About half of them were from offices in Liverpool; the rest from London offices. Their military training had begun nine months before, they said, when the war started. But it had not, as you could see, made up for the bad diet, the lack of fresh air and sun and physical training, of the post-war years. Thirty yards away German infantry were marching up the road toward the front. I could not help comparing them with these British lads. The Germans, bronzed, clean cut physically, healthy looking as lions, chests developed and all. It was part of the unequal fight.[3]

We are facing a tough, determined foe who has had the advantage of having trained for years for this conflict while we have been becoming softer and softer. The biologically sterile physical education programs in our schools have imposed serious handicaps upon our men who must face a well-prepared, experienced enemy. The Army and Navy have found it difficult—impossible in many cases—to make strong and tough bodies which have been neglected for years. For our failure to give adequate emphasis to physical fitness in our schools we are going to have to pay a price in "blood, sweat and tears" which might well have been averted.

FACTORS HINDERING PHYSICAL EDUCATION'S CONTRIBUTION TO PHYSICAL FITNESS.

Why has physical education failed in its responsibility for making our population physically fit? Why have the debilitating influences of our industrialized and mechanized society not been more successfully offset by our school physical education programs? There are several reasons for this failure.

1. *Lack of adequate time allotment.* As an outgrowth of World War I many states passed compulsory legislation which set up minimum standards for physical education. Although the time allotments which were required represented an improvement over what they had been previously they did not go far enough. The vast majority of secondary school students do not spend more than two thirty-minute periods per week in physical education. In such a situation it is obviously impossible to hope to attain any measure of physical fitness. A daily period of one hour is a minimum essential.

2. *Lack of trained leadership.* A daily period will not automatically result in a well-rounded, comprehensive physical education program. Skilled leadership is also essential. Such leadership will not be found in one who is without adequate professional preparation in this field, regardless of his athletic ability. Many school administrators, school boards and the public fail to realize that it takes four or five years of intensive preparation to properly train a teacher of physical education. Such preparation involves a thorough knowledge of biology, anatomy, physiology, kinesiology, hygiene, and care and prevention of injuries in order that the physical educator is adequately acquainted with and knows how to protect the organism with which he is concerned. It involves an understanding of educational philosophy, educational psychology, and personality development.

[3] Quoted by permission of Alfred A. Knops, publisher.

In the field of physical education it requires a competence in the techniques of a wide variety of physical education activities as well as a knowledge of programs, methods of teaching, administration and tests and measurements in this field. *Mere intercollegiate athletic experience can never be a substitute for such training.*

3. *Lack of Concern for all students.* In the past physical educators have developed a high degree of fitness in a small, selected group of their students. In doing this many have neglected the welfare of the great majority of boys. Many of the coaches have not been interested in giving their best efforts to their physical education classes. They have felt that they must conserve their energy and devote all of their attention to their varsity teams—a group which rarely represents more than fifteen to twenty per cent of the total number of boys.

Such a situation should not be tolerated today—or at any time for that matter. Such physical education is what our enemies desire and it should be classed as a subversive activity. Because of this type of teaching many American boys will not return from the battle fronts in Europe, Asia, Africa and Australia. The era of the ball-tossing physical educators represents one of the blackest pages in the long history of physical education.

This should not be considered an indictment against interschool athletics. Would that interschool athletics reached all of our students! This is rather an indictment against those physical educators who failed to serve *all* the students to the extent to which they were capable. Good physical education programs and good varsity teams are not incompatible. In fact well-rounded, effective service programs are a great aid to interschool athletics. This has been repeatedly demonstrated. The physical educator who lacks the energy and stamina to give his best efforts to his physical education classes as well as to his varsity teams is in the wrong profession.

4. *Varying Emphases Among Physical Educators.* While most physical educators are emphasizing physical fitness today, such was not the case several years ago. In fact, physical fitness was de-emphasized in favor of other objectives of physical education. For several thousand years the chief emphasis in physical education had been strength, endurance, agility and coordination. After World War I, however, when it became recognized that physical education had important educational contributions to make, the biological objectives which had been so important for centuries were minimized and became as McCloy termed them "the forgotten objectives of physical education." Teachers in this field became increasingly interested in personality development, integration, mental hygiene and guidance. The recreational aspects of physical education were stressed, particularly after the economic depression of the early thirties. Despite the objections of a few physical educators, notably McCloy, the pendulum swung further and further away from the biological to the newer educational and recreational objectives throughout the decades of the twenties and thirties.

These new objectives greatly increased the educational importance and significance of physical education. They are extremely important objectives and deserve the constant support of all physical educators. But there is no need to neglect the older objectives. Physical fitness is not incompatible with the newer purposes of physical education. In fact, when physical fitness is achieved more effective results may be brought about insofar as all the other objectives are concerned.

Furthermore the attainment of strength, endurance, coordination and agility is physical education's *unique* responsibility. Physical education *shares* with other phases of the school such objectives as mental hygiene, personality and character development, and recreational skills. However, if the biological objectives are not developed in physical education they will never be achieved insofar as the school is concerned. In this connection it should be noted that the foundation of an adequate physical development must be laid in youth. "What a man is after eighteen depends largely on what he was before eighteen." For these reasons physical fitness should always be emphasized in physical education just as all the other objectives are emphasized. Physical educators are certainly capable of pursuing more than one objective at a time.

Many physical educators are excusing their failure to develop physical fitness in our youth during the pre-war period on the basis that they were "educating for peace." Certainly, it has never been the philosophy of the American people to engage in elaborate preparation for war during time of peace. However, physical fitness is scarcely less important in peace than in war. *While physical education can make men more fit for war, it also can make them more fit for better and fuller living in a peaceful democratic society.*

Furthermore, when a physical educator fails to give adequate emphasis to the biological objectives he is defeating his other objectives. For example, the recreational aspects of physical education are dependent upon the development of an adequate degree of skill. No one enjoys spending his leisure in an activity in which he has no skill. *However, this skill is based upon strength, coordination, agility and stamina.*

5. *Lack of Adequate Facilities.* There is no question that the lack of adequate facilities has proven a handicap to physical educators. In California many schools lack adequate facilities during

the winter months when students must go indoors. When large classes of boys and girls are compelled to use a small gymnasium at the same time it is difficult to carry on a comprehensive program. However, capable leadership will mitigate this problem to some extent. Poor physical educators always find "inadequate facilities" a very convenient excuse for their poor programs.

6. *Lack of Administrative Assistance.* The principal has it within his power to facilitate the physical education program in a number of ways. One of the most effective aids is to limit classes to a reasonable size. It is also exceedingly helpful if these classes are arranged homogeneously. The physical education teacher should not be expected to carry a heavier teaching load than any other teacher. Overloading the physical educator often leads him to neglect the service classes. The practice of substituting other activities for physical education is often overdone. In recent months when physical education should have been intensified it was discontinued in many schools for weeks in order that the time could be devoted to first aid instruction and other defense activities.

One additional statement in regard to the school administrator is pertinent at this point. Superintendents and principals are usually alert to deficiencies in other aspects of the curriculum but they seem to lack an intelligent appreciation of what good physical education is. Their selection of untrained personnel, their toleration of ball-tossing and other slipshod methods of teaching, their acceptance of narrow, ineffective programs, their lack of insistence upon an evaluation program appear to indicate that many of them lack a critical insight into modern physical education. In the last analysis the principal is responsible for the entire program of his school and poor physical education is a reflection on his administration. *If school administrators demanded from their physical educators the same high standards which are required for all other teachers, a lot of poor physical education would be eliminated.*

MOTOR SKILLS

In addition to physical fitness physical education has other important contributions to make to the war effort. Many physical education activities have direct military value. Of greatest importance in this war is swimming. Our armed forces must travel on the water, over the water and under the water to meet the enemy. Many lives have been lost already because men were unable to swim fifty yards to a place of safety or to stay afloat for several minutes until they could be rescued. It is estimated that fifty per cent of men entering the armed forces are unable to swim. Under present circumstances swimming and life saving are the most valuable physical education activities which can be taught in our schools for the duration of the war.

Boxing, wrestling and hand-to-hand combative activities are all of practical value to those who will engage in actual combat. Boxing, in addition to improving agility and quickness, aids in the development of skill in bayonet fighting. The American form of wrestling is more effective than Japanese jiu-jitsu as a personal combat activity. Hand-to-hand fighting has excellent utility in combat value.

Tumbling and apparatus activities are strongly recommended by both Army and Navy Air Forces and should be included in all physical education programs. These are among the finest activities in physical education for developing strength, agility, coordination, balance, and flexibility, all of which are essential for air force personnel. In addition, participation in these activities leads to the development of skills which are necessary for all those using parachutes.

RECREATION

Many people regard recreation as a non-essential activity in time of war. They consider it as a peacetime luxury with which we should dispense while we concentrate all of our efforts on the grim, serious business of winning the war. This attitude on the part of many individuals reflects a lack of understanding of the true nature and value of recreation.

Recreation becomes increasingly valuable during war because of its value in building and sustaining morale. Its real value is usually conceded to lie in the nervous release which it affords from the customary and coercive activities which our environment imposes upon us. War with its fears and anxieties increases the nervous tension of a people. Experience has demonstrated that under such circumstances people will crack under the strain if they cannot play. The English people found it necessary to keep open their places of recreation and entertainment during months of bombing. Even in the air raid shelters, recreation programs were carried on. People need to throw off their restraints, to forget their worries and apprehensions in wholesome recreational activities. Recreation means restoration, rehabilitation, reconstruction, rejuvenation, regeneration and relaxation. These, in turn, mean morale.

The war has reduced but not eliminated leisure. The soldier at the front, the pilot, the sailor and marine must all be relieved periodically for rest and relaxation. The same is true for workers in war industries. One of the greatest problems in our armed forces has been the lack of resources upon the part of the men themselves for wholesome recreation. Recreational illiteracy often brings about a disintegration of morale. Under

these circumstances education for leisure is just as important, if not more important, now as during peace.

Physical education's contribution to the recreational resources of an individual is well recognized. Recreational sports are in some respects the best leisure time activities available in time of war. Athletics are especially valuable in relieving nervous tension because they elicit greater concentration than many sedentary activities. In addition, many recreational sports build and maintain physical fitness. Our military leaders consider certain sports as the best type of recreational activity for the armed forces because they provide espirit-de-corps as well as recreation and physical fitness. Some of the best activities of this type are soccer, basketball, baseball, football, speedball, boxing and wrestling.

Since Pearl Harbor many physical educators have been emphasizing physical fitness and the essential motor skills and have eliminated from their programs such activities as volleyball, softball, tennis, badminton, bowling, handball, social dancing, table tennis and golf. *While physical fitness and motor skills should have priorities in the programs because of their survival value these other activities should be retained if possible.* If reasonable standards of physical fitness and motor skill are attained in school physical education programs, and opportunity still exists to include some of the above activities in the program, it should be done by all means. Consideration should be given particularly to volleyball, table tennis, bowling, softball, horseshoes and social dancing which are engaged in most frequently by our service men.

DEMOCRATIC CITIZENSHIP

Throughout history physical education has reflected the national social philosophy of a people and served the dominant purpose of the state. Hitler in Germany and Mussolini in Italy both have used physical education to indoctrinate the youth of those countries with their philosophy as well as to build in them habits of mind and body which served the state. Physical education in America can contribute to our national ideal by emphasizing the humanitarian and social values which are in accord with the democratic concept. It was Galsworthy who said, "Sport which keeps the flag of idealism flying is the only saving grace in the world today."

Physical education offers a laboratory situation in which the skilled leader may develop attitudes of tolerance, justice, respect for the rights and feelings of others, sportsmanship, and other attitudes which are so essential today and which will be even more important after the peace. "The School athletic team which has members of many nationistic groups on it contributes to racial tolerance and the breadth of vision which is the essence of democracy. . . . Children should have association with all classes and races in ever-increasing numbers and widening circles if democracy is ever to be a fact. Democracy is more than a form of government; it is a form of associated living."[4]

Sports and games call for team play—one of the foundation stones of a democracy and one which is needed to the utmost today. Team sports are cooperative enterprises in which each member of the group must subjugate any personal selfish desires for the welfare of the group. There are many sacrifices to be made and much hard work to be done. If we are to win this war and the peace which follows we shall need all of the cooperation, unselfishness, loyalty, public spirit, and consideration of others which team sports can engender.

While there are rich opportunities in physical education to teach habits and attitudes which are consistent with our democratic ideal, there are also opportunities to develop undemocratic tendencies. When the fundamental principles of fair play are violated, when boys are exploited for the selfish purposes of their coach, when boys are denied the opportunity to play because of creed or color, when the welfare of the majority of boys is neglected for the benefit of a few, then physical education is fostering ideals which are contrary to those for which we are fighting.

The contribution of physical education in developing democratic citizenship is ably summarized by John K. Tunis in his "Democracy and Sport:"

> Today we need to strengthen the core and fiber of our democracy, we should pay more attention than ever to sport. We need to give everyone an equal chance to play—rich, poor, black, white, Jew, Gentile, Chinaman, those who are quick and perceptive as well as those who in sports are slow and inept. We must not decrease the sporting opportunities of the many. We should in every possible way subordinate to the good of the mass, the wishes of the publicized title-holders who draw headlines in the press and stare at us from the newsreels. Fair play. Respect for others. Deference to constituted authority. These are part of the warp and woof of democratic life as they are the essence of true sport. Never before in the history of the United States have we so needed the spirit of democracy in our sport and the spirit of sport in our democracy.

The Next Steps. In order to implement the contributions of physical education to the war effort

[4] Mitchell, E. D. and Mason, B. S. *The Theory of Play.* New York, A. S. Barnes & Co., 1938, p. 193.

and the peace which will follow several specific recommendations are suggested:

1. Since physical education's contribution to physical fitness is so vitally important every effort must be made to attain this end. This necessitates a testing program. Simple, valid, reliable, and easily administered tests of strength, endurance, agility and coordination are available. Without such a program the physical educator cannot diagnose the needs of all the students and prescribe a proper program of activities to meet the needs.

2. Dr. Victor Heiser recommends "Scramble out of the lap of luxury, forget our soft, air-conditioned, effeminized gadgetry called civilization and toughen up." A toughening up process can never occur in two thirty-minute periods per week of physical education. Every secondary school in America requires a daily period of one hour for physical education.

3. Physical fitness tests have consistently shown that the greatest weakness of this generation of our youth is the lack of strength in the arms and shoulder girdle. Specific activities to remedy this weakness are chins, dips (push-ups), rope-climbing, tumbling, apparatus activities and wrestling. These activities should be included in every physical education program.

4. The importance of swimming, life-saving, boxing and hand-to-hand combative activities has already been indicated. In swimming the emphasis has been shifted from the crawl stroke to the breast stroke and under water swimming and treading water because of their utility at the present time. The ability to swim should be a requirement for graduation from every high school which has access to a swimming pool.

5. The interschool program should be expanded to include a much larger number of boys. Intramural athletics should be increased to the extent that every boy who is not on a varsity team is on an intramural team.

6. No one should be excused from physical education. The practice of substituting R. O. T. C. or band practice for physical education does not have the support of military officials. Special provision should be made for those with physical defects. The practice of excusing such students entirely or of substituting clerical work, towel dispensing or officiating cannot be justified.

7. The entire emphasis of the program should not be upon physical fitness. *After all students have been brought up to a satisfactory level of fitness* the other objectives of physical education should be emphasized. Recreation is still important and volleyball, horseshoes, bowling, softball, and social dancing should be taught *after* students have attained adequate physical development.

8. The present emergency calls for the finest, most capable teaching in physical education. It is unfortunate that at such a time many of the best teachers have been called into the service. The fact that many of their students today will be in the front line trenches tomorrow should inspire those teachers remaining to give their very best efforts. This is no time for ball-tossing, for slipshod methods of teaching, or for forty boys to be sitting in the bleachers awaiting their turn to play five minutes of basketball. Physical education has a great deal to give every boy, and capable leadership is essential.

9. Proper emphasis should be given to team sports such as football, basketball, soccer, speedball, rugby and others. These sports are excellent for developing physical fitness and they are widely engaged in by our service men. In addition these activities offer splendid opportunities to teach teamwork, cooperation, loyalty, service, unselfishness which add up to espirit-de-corps. Qualities such as tolerance, justice, respect for the rights of others and sportsmanship, all of which will be of particular value in the reconstruction period, may also be developed.

10. A carefully-designed, well-balanced set of calisthenic exercises should be thoroughly taught every student. Often times individuals who feel the need for exercise have no other recourse than to engage in setting-up exercises at home. McCloy has shown that we do not have sufficient recreational facilities available for all of our people. He has pointed out that for a city the size of Detroit it would require 600 eighteen-hole golf links, 40,000 tennis courts, 300 swimming pools, 2,000 volleyball courts, 2,000 softball diamonds, 1,000 places for track and field athletics, and 2,000 gymnasiums to provide recreational facilities for half of the population between twenty and forty-five years of age to participate three times per week. Furthermore, many individuals are unable to find time or facilities for recreation. If people are to employ setting-up exercises at home on occasions it would be helpful if they used the best exercises available.

11. Physical educators cannot afford to overlook the medical and nutritional aspects of physical fitness. They must appreciate that their exercise program will not by itself solve the problem of physical fitness. Only by cooperating with the health service and health instruction programs can the physical educator make his most effective contribution.

HOW'S THE BALANCE?*

DR. JOHN SCANNELL
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No, we're not asking about the check book after the tenth of the month, but about the program. The physical education program in the high schools of the state is a satisfactory one in most cases. We have the word of the field men of the state department to that effect. "In a few cases, however . . . the requirements have been too concentrated and administered more strenuously than was intended . . . instructors are advised that the training should be viewed as a long term program rather than one to bring the peak of physical condition in a comparatively few weeks." The quotes are not from the state department, but from a letter recently sent to all college V-12 training units. However, it seems to me that it might apply equally well to the high schools.

It might be well for all of us to examine our programs now and make sure that we haven't lost balance in the program in going over to a new emphasis. The beginning of what we may consider as the "war program" in the state was marked by a shift of emphasis from the games and sports classes to a stress on calisthenics, obstacle course running, and a general increase in the formality of organization. It carried plenty of social pressure and was well received by most students. However, time has taken off that first edge and the narrowness of the program adopted in many places is becoming evident.

The change to the war-time program should really have been a change in emphasis and tempo, rather than a change in activity. For example, calisthenic work of some type has always had a place in the well ordered lesson. We know though, that for some reason hard to understand, the man who stressed it at four in the afternoon with his football squad might ignore it at ten in the morning when he tossed out the basketballs to the ninth grade gym class.

The profession has always recognized two distinct responsibilities in the framing of the program. First, we must develop the student physically to a point approaching his potential capacity. To do this we are to make every lesson as vigorous as is consistent with safety. Second, we are to equip the student with those skills which, used in his leisure, will maintain this physical condition at a high level. We must ask ourselves if, in achieving the first of these goals, we are not slighting the second.

It is just as important as ever that the game skills of the type that carry over into leisure time be taught at the high school level. Definite injustice is done to the boy who is sent to college as a trainee or to a camp as an enlisted man if he is not so equipped. The camps offer opportunity for game participation in free time, and they make an effort to set up novice sections to teach the activities. But in actual practice it is only the man already equipped with the skills necessary to play the game who can take advantage of the opportunity offered. The boy who goes into the college program finds himself in a non-sports conditioning class for the first semester and then is transferred to a maintenance classification which assumes that he is already equipped with game skills in wide variety.

This season of the year is New Year for the physical educator. It is now that he makes those good resolutions, now that his classes have pep, now that he does his best work. Now, then, is the time to check on our programs and determine whether or not we have jumped the fence in the effort to achieve intensity in the program. An intensive program need not be a narrow one. Adequate preparation in game skills is possible along with a good developmental program. With the increased time allotment both are within reach. It's only our old story of the balanced program over again. With the student in class every day we have time for the teaching of apparatus and tumbling stunts, for work in boxing and wrestling, for the running activities with and without obstacles, and for the teaching of game skills. It gives time for meeting our obligation in the matter of swimming in the situation in which a pool is available in the school or elsewhere in the community.

The school man's job in physical education is not as simple as that of a man in a "boot" camp or army center, who will handle the men for only a few weeks. The school job is a long pull rather than a short push. It cannot be properly done without balance in the program. Let's have that balance.

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IMPLICATIONS OF THE PHYSICAL FITNESS PROGRAM FOR PUBLIC SCHOOL PHYSICAL EDUCATION

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After the war we doubtless will see great changes in education in the United States. We are now in the midst of a world wide technological revolution. The masses are on the march. It is said that the productive power of the nation is now equal to that which can be produced by three billion men. But after the war many of these same men will not be needed for the production of material goods. What, then, will become of thousands of these workers? It is highly probable that large numbers of them will go into services and welfare activities. There is almost certain to be greater integration and unification of community services during and after the war. The U. S. O. may well become a permanent organization.

What, it may be asked, will be the effect of the war on education? Education may no longer be primarily a state enterprise. State boundaries may even disappear in this regard. It is almost certain that the Federal Government will assume an increasingly prominent part in promoting educational and other welfare activities. Whether we like it or not, these are the signs of the times and the trend seems unmistakably in that direction.

It has been said that education can be made a force to equalize the conditions of man or it can be made a force to create class, sectional, and race distinctions. Because of the mobility of the population, the kind and quality of education, including physical education, offered in *each state and community* are of vital concern to all the other states and communities. Nearly one-fourth of the nation's American-born population, for example, now live outside their native states. Seasonal migrations also make education, including physical education, interstate in character and a *federal* problem.

Inequalities of educational opportunities under the present plan are indefensible. One state, for example, spends $135 per year per pupil for schools while another spends only $25. The average annual salary for teachers ranges from $2,600 to $550. The value of public elementary and secondary school property per pupil enrolled varies from $526 to $81. City children go to school nine or ten months a year while a million rural children cannot go to school even six months. In one state nearly all children attend high school, in another only one in three can do so. Some states have disproportionately large numbers of children of school age, which means that the productive population in these states is responsible for an educational burden relatively twice as heavy as that of other states. Rural areas and small towns generally have a higher ratio of children to adults than do the cities. Moreover, the largest proportion of children under 5 years of age are found in states with the least taxpaying ability and the lowest standards of educational opportunities. In general, these states have the heaviest educational responsibilities and they provide the least adequate school opportunities. This, we are told, is not due to lack of financial effort in such states for those states making the greatest effort tend to spend relatively small amounts per pupil and vice versa. To support a defensible minimum school program some states would be required to make more than twelve times as much effort as certain other states. There are, for example, 127,000 school districts in the United States. Many of these are small and financially poor and need to be consolidated because they are responsible for poorly paid teachers, limited courses of study, lack of supervision, and inadequate school buildings.

Such inequalities make it obvious that a number of states cannot provide suitable opportunities for every child to get an education. The citizens of each state, then, should be concerned about the *extent* and *quality* of education provided in every other state, not merely for humanitarian reasons, but because each state receives annually a large number of persons who attended schools in other states, and who bring with them the habits, attitudes, knowledge, skills, and defects acquired in those schools. After an extensive nation-wide study the President's Advisory Committee on Education unanimously concluded that federal aid for education is both desirable and necessary. The facts clearly indicated that no sound plan of local or state taxation can be devised and put into effect that will support in every community a school system which meets minimum acceptable standards. The report further states that unless the federal government does participate in the financial support of the schools several million children will be denied, to a large extent, the educational opportunities that should be regarded as their birthright.

This conclusion is not the biased opinion of a small group of professionally interested persons. Rather, this is the considered judgment of a group of citizens representing religious groups, women's organizations, business, labor, agriculture, educa-

tion, and government. They had access to one of the most complete collections of evidence regarding our school systems that has ever been assembled.

This is a strong case for federal participation and support of education. What has been said regarding inequalities of opportunities for education in general can be said regarding inequalities of opportunities in health and physical education in particular. For years we have been trying to lift physical education by its boot-straps, so to speak, to the status and dignity of a profession. Much has been accomplished if we compare present programs with conditions twenty-five years ago. But in our attempt to develop and maintain the physical fitness of millions of school children we leave much to be desired. And we reach a very small per cent of citizens outside of schools. On a recent sabbatical trip of some 18,000 miles the writer found people living in unhealthful conditions which must be worse than those in which cave men lived. Physical fitness would have been impossible because of handicapping defects, unsanitary surroundings, and lack of anything approximating adequate nutrition. We have earnestly sought more support from taxpayers, boards of education, and school administrators, but in spite of our best efforts gross inequalities in opportunity for health and physical fitness still exist in all parts of the country. Just last year our association promoted a bill designed to secure federal financial aid for our program in the schools. A frank and honest appraisal of the effort shows that we did not have the wholehearted, active support of any group outside our immediate profession. In fact, considerable opposition was aroused among certain members of the medical profession, health specialists, recreation workers, camp directors, general educators, and even the school administrators.

What are we to learn from these experiences? That we cannot secure federal aid by ourselves. We need the cooperation of the groups mentioned above and all citizens everywhere. In addition, we need the cooperation of the federal government even though we cannot now secure financial aid. We need federal cooperation for several reasons:

1. In the first place, federal cooperation in promoting a physical fitness program is a first step toward federal financial aid. But our chances of securing such aid seem to be best guaranteed by first developing, with the aid of the Federal Government, the best possible programs with present personnel and facilities. If we do this task well the public will demand more funds for health and physical fitness. This seems to be a better plan than that of trying to pass a bill at this time.

2. Because of its prestige the Federal Government can publicize the need for health and physical fitness far more extensively and effectively than can teachers of physical education. Admitting that some of the publicity has been harmful it does not necessarily need to be so.

3. The Federal Government can extend the program of physical fitness to *all* citizens—130 million of them. The schools reach a much smaller number of individuals.

4. The Federal Government can stimulate state and local boards of education and taxpayers in general to provide leadership facilities and programs in states and local communities where no programs now exist.

5. The Federal Government can also provide leadership to state and local communities where programs are now in operation.

The wisdom of cooperating with the Government in its attempt to promote a program of physical fitness for *all* citizens has been questioned by some persons on the grounds that our profession is being used as a political football. Any other policy than one of cooperation seems incredible during the war emergency. If we, as a profession, stand aside now and criticise the movement, what, may I ask, will be our status after the war is over? It is certain that we would not be in any position to seek financial aid from the Government. We would still be on the outside looking in. If we, as a profession, do not cooperate the Government will promote a physical fitness program anyway.

I, for one, plan to continue to cooperate in this movement for the following reasons:

In the first place, this is the first time in our history that the Government has attempted to cooperate with education and other agencies in the promotion of the physical fitness of *all* the people.

Secondly, the transfer of the Division of Physical Fitness to the Federal Security Agency places physical education in a stronger position than at any previous time. The effects of the transfer may be epoch-making for physical education in the United States. If there is to be greater integration and unification of community services during and after the war, and if the Federal government is to play in increasingly prominent part, the transfer of the Physical Fitness Division to a federal welfare agency may have far-reaching significance. *The Federal Security Agency may well set the pattern for local communities* since it is now made up of many of the welfare agencies commonly found in local communities. The Federal Security Agency includes: The U. S. Office of Education, the U. S. Public Health Service, the U. S. Employment Service, the Social Security Board, the Civilian Conservation Corps, the National Youth Administration, and also the Office of Defense Health and Welfare Activities, including Nutrition and Recreation. Physical education logically belongs with

this group. Welfare services, whether federal or local, which do not include physical fitness, are not complete.

The Division of Physical Fitness is to be a separate division within the Federal Security Agency. But whether it remains a separate division or whether it eventually becomes a phase of the work of the Offices of Education and Public Health Service, as some persons believe it should, the fact remains that the present organization presents possibilities that are almost limitless. We are in an all-out war, and this is no time to quibble. The Government has recognized the need for man power as well as the need for materials. We cannot win the war with machines alone. Soldiers, industrial workers, and citizens alike must be physically fit to perform the task they are called upon to do. As has been stated many times before, this attempt to promote the physical fitness of 130 million citizens is a colossal undertaking which staggers the imagination. It cannot be done by Mr. Kelly alone or by any one group. It will require the best brains and efforts of all individuals and groups working wholeheartedly together. The task seems almost insurmountable but herein lies the challenge.

A NATIONAL PHYSICAL FITNESS PROGRAM FOR THE ADMINISTRATOR OF HEALTH AND PHYSICAL EDUCATION IN PUBLIC SCHOOLS*

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Administrative Director's Section A. A. H. P. E. R.

This Liberty War has brought forcibly to the attention of public school superintendents and administrators of Health Education the need for changes in the curriculum. For years we have known that students were leaving school with physical handicaps. More girls and boys were graduating and the average weight and height of these diploma winners gradually increased. These conditions gave a false impression concerning health and strength for increased weight can be flabby fat due to sitting behind an auto wheel or listening to a radio rather than organic improvement from taking part in vigorous outdoor games.

The implications of the medical examinations given draftees are now being realized. In the issue of Public Health Reports, Vol. 56, No. 19, May 1941 we read, "A serious state of ill health of American Youth is revealed by the figures available as to the results of medical examinations made so far . . . More than 40% . . . are unfit for general military service."

Nine months later, January 1942, two million men had been examined. One million were accepted for war service but nine hundred thousand were rejected because of mental or physical defects. Another one hundred thousand were rejected because of inability to read, write, or understand commands. Those classified for limited service numbered four hundred seventy thousand and perhaps two hundred thousand of these can be given corrective treatment making them eligible for general military service.

A recent statistical bulletin of the Metropolitan Life Insurance Company attempts to pooh-pooh these findings by the following statement, "The American people can definitely be assured that the charge sometimes made, that forty-five per cent of our young men are physically unfit, is entirely unfounded."

The statement continues that the figures are based on very rigid standards of examination prior to our entry into the war. This argument is true in regard to better means of determining early tuberculosis by the fluoroscope, but the medical restrictions on several counts are now much less than in 1917. Now draftees having relaxed arches (flat feet) or teeth, false or capped (if they oppose), are inducted along with venereal cases under treatment. All such cases were among the 33% rejected in the World War and still our present rejections are 45%!

The bulletin continues by stating that eleven per cent of men between the ages of 20 and 44 or one million men are among us simply because of improvement in mortality since 1900 due to advances in medicine and public health. Granting that our standards of living have been rising for the past forty years and that increased longevity has matured 2,800,000 additional men among the 16,800,000 previously registered, it does not follow that the individuals are available for military service; the recent examination statistics prove appallingly otherwise.

What are the conditions among high school graduates? Among the 3015 graduates from the public schools of a large city in June, 1941, there were 2,065 remediable physical handicaps discovered by the annual examinations of the school physicians which were uncorrected after repeated notices to the parents.

What about the endurance, strength, agility, and skill of high school students? The physical achieve-

* Presented at Administration Directors Section Meeting, A. A. H. P. E. and R., New Orleans, 1942.

ment tests in a large city conducted during the past eight years definitely show that few boys and still fewer girls can lift their weight to climb a fence five feet high or jump across a pit four feet wide. The average records for the pull-ups, the short dash, the rope climb, or a target throw are considerably lower than those made twenty years ago. Agility as shown by performing simple tumbling exercises is less, posture is poorer, the muscles of the shoulder girdle and arms are flabbier in the average boy. The physical needs are evident.

What are the mental and emotional needs among school children? J. Edgar Hoover, Director of the Federal Bureau of Investigation has graphically stated some figures. "Every twenty-four hours four thousand major crimes are committed in the United States! Before this year comes to a close we may expect one out of every seventeen homes will be a victim of crime—either some member will be charged with an offense or will have suffered a loss ranging from petty larceny to life itself. This problem is primarily a juvenile problem for one out of every five persons arrested is under twenty-one. In their formative years they should reap the rich benefits of education, athletics, recreation, and wholesome associations with people of their own age."

Crimes may occur among those who are only physically fit but never among those who are mentally and emotionally prepared. Proper nutrition, sufficient rest, freedom from worry, daily physical exercise, and cleanliness are vital needs.

The administrator of a Health and Physical Education program seldom has the authority to institute an adequate program. It takes a war to arouse the general public and those who control educational policies. Many states passed laws during and after the World War which called for programs of health and physical education, but most states failed to provide adequate daily activity schedules. No specific funds to provide competent teachers, adequate areas, or equipment were furnished to make the proposed programs effective.

Every administrator should be familiar with the national standards revised in 1939 by the Association for Health, Physical Education and Recreation and become a disciple to educate educators. The ten cardinal points to produce an adequate physical fitness regime in schools may be epitomized as follows:

1. A health protection program.
   a. Adequate health examination.
   b. Control of communicable disease.
   c. Healthful school environment.
   d. Capacity for self direction in health.
2. Health instruction in every grade.
   a. Nutrition.
   b. First Aid.
   c. Safety.
3. Daily physical activity period.
   a. Educationally sound.
   b. Developmentally desirable.
   c. Graded progressively.
   d. Adapted to individuals and groups.
4. Opportunities for developing recreational hobbies.
   a. Music.
   b. Literature and drama.
   c. Plastic, fine and industrial arts.
   d. Physical activities; games.
   e. Club activities.
5. Adequate indoor and outdoor facilities.
   a. Sufficient time.
   b. Prepared personnel.
   c. Organized classes.
6. Pupil classification.
   a. Grading.
   b. Promotion.
7. A single executive department.
   a. Health.
   b. Physical Education.
   c. Recreation.
8. Accreditment.
   a. For promotion.
   b. For graduation.
   c. Acceptance for college entrance.
9. Community extension adult use of schools.
   a. School facilities for members of community.
10. Professionally educated personnel.
    a. School physicians, dentists, nurses.
    b. Administrators, supervisors, teachers.
    c. Special nutritionists, mental hygienists.
    d. Special health and recreation workers.
    e. Physical educators.
    f. Athletic coaches.

What can the school Administrator do to make this creed of the American Association come true?

1. He must believe in these principles and advocate the adoption of them in his own school system.
2. He might draw the deadly parallel by checking the items not yet adopted by his Board of Education; then show the checked list to his Superintendent.
3. The administrator should advocate a health guidance program in all grades. The 1942 Yearbook of the American Association of School Administrators is a most opportune publication. The title is "Health in Schools." The following is quoted from the first chapter: "The health of the nation has not reached an ideal status or even a satisfactory status; it nevertheless is no cause for despair. It is neither as good as it could be nor as bad as it might be and it is constantly improving. The opportunity for improvement constitutes a challenge to the schools and an obligation

to evaluate their present contributions with a view to improvement. It would be as unfair to attribute ill health in the nation to failure of the schools, as it would be unwarranted to claim all health progress as caused solely by the schools. Yet the schools are a vital factor. In the school is offered unparalleled opportunity for acquiring health knowledge, forming health attitudes, and establishing health practices. Ignorance about health remains widespread, even among otherwise well-informed and well-educated persons. Superstition and misinformation are by no means confined to the illiterate or those with limited education. In the health program of the modern school in a democracy there are six basic areas of responsibility. Here they are merely listed:

1. A healthful environment must be provided.
2. A health guidance program is essential.
3. Emergency health conditions demand immediate care.
4. Accurate health information should be taught.
5. Sound health habits and attitudes need to be established.
6. The exceptional child requires a modified school program."

4. He can compile an accurate list of the remediable handicaps present in the student body and see that all students so afflicted are given individualized corrective activity and check on diet, rest, and cleanliness.
5. He can advocate that special teachers of physical education in elementary schools be given 10 A. M. to 5 P. M. hours of service so that every afternoon after school there will be opportunity for vigorous games, scout activities, hikes, and bicycle trips for groups to places of interest, on prearranged afternoons and Saturdays.
6. He can foster the slogan, "Daily vigorous outdoor exercise for all."
7. He should advocate interclass games and athletic contests for groups followed by supervised interscholastic games for those who excel. *Athletic competition is the father of student morale.*
8. He should advocate centralized administration of secondary school athletics where several schools are involved; financed from the general educational budget rather than from gate receipts at football games.
9. He might advocate a farming course for city boys who would thus be physically conditioned while being fitted to work as farm laborers during the summer vacation.

In Baltimore four hundred and ten volunteer lads from high schools answered the call of Major Louis E. Lamborn, Head Master of McDonough School, when he and R. N. Wills, a teacher, broached the unique idea of a six-Saturday course at the suburban school. The student farmers included scrawny youngsters weighing only a hundred pounds while others were burly football players who tipped the scales near the two hundred pound mark. All arrived at the large estate dressed for work and that is what they did. After registering and listening to an assembly talk on farm psychology, although many of them probably did not recognize it as such, the boys were divided into six groups and went to work. They had been warned that the instructors would be tough and that anyone who wished to drop the work or not show up next week could do so and no questions would be asked.

Some boys learned the care of horses, cattle and hogs, others dug postholes or whitewashed fences, still others observed tractors with power belts to other machines. Swinging scythes, currying cows, transplanting vegetables and harnessing horses were new to most city boys. When the boys complete the course they will be ready for assignment to farms at the same wages as other farm laborers so much needed in war time. Men of all types are needed on farms. Young boys can do chores while the older and stronger boys can work in the fields. Boys in the intermediate class can help during planting and harvesting times. Nearly every high school in the city was represented by boys from thirteen to nineteen years of age.

10. The Administrator should advocate the slogan, "Every school lighted at night." Such a community center with volunteer teachers can conduct a program of conditioning and recreative activity for men and women of military age not yet in service, youths who have left school too early, industrial workers, air raid wardens, and children who may later be evacuated from industrial centers.
11. We must utilize every school, athletic field, swimming pool, and play space to develop militant fitness, apportioning the available time and facilities to girls, boys, women, and men.
12. We must advocate that perishable supplies needed for games in community centers should be freely supplied by boards of education and recreation, churches, and clubs.
13. We should know the reasons why military drill is not an adequate substitute for the physical education of boys. Major General Reckord of the Third Corps Area has said that if the

schools will only turn out healthy vigorous boys, the military authorities will give them all the drill needed in a few weeks intensive camp life.

It would be well for many schools to adopt the more vigorous training given to boys at the West Point Military Academy and the Annapolis Naval Academy. At these institutions a well rounded course includes combat games, indoor and outdoor gymnastics and athletics. If this is military training let us have more of it for all boys everywhere. This must not be confused with mere marching in answer to mass commands while carrying a wooden gun.

14. The Administrator must know and advocate the desirable outcomes which only organized camping can give a boy or girl. Climbing a mountain, paddling a canoe, trailing through woods, sawing and chopping wood, erecting camps; all give the toughening of vital organs possessed by our pioneers. These are the qualities needed in our national emergency.
15. The Administrator should urge the establishment of school camps for city children where a study program could be combined with a general knowledge and experience of outdoor life. The child would thus become familiar with life and study away from home and could easily adjust himself to being evacuated to the same location at any time of the year should the necessity arise.

No one can predict the end of the war, but it is almost certain that its duration will be several years. Every boy in a secondary school is a potential draftee. School Administrators have a large part to play in developing vigor, stamina, morale, and patriotism in this democracy.

INCREASED RESPONSIBILITIES IN DEVELOPING AND CONSERVING HEALTH IN WARTIME

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The American Association for Health, Physical Education and Recreation is to be commended for the timely and inspiring program it has arranged this year. I don't know when I have seen a more interesting array of good subjects and speakers. Equally impressed have I been with the manner in which all of these subjects seem to focus on one common goal and objective—that is, increasing physical fitness for American people in order that they may be better equipped to cope with current-day problems. Never before in history have we faced a more serious theat to our liberties than we do today. And never has there been a greater challenge to the combined energies, resources and abilities of American leadership in the broad fields of education, health, and welfare! Much of the success of the national defense efforts, as well as the future welfare of citizens everywhere, depends in large measure on how well we utilize those important media of education which we know to be effective in influencing the habits and attitudes of individuals, to make them want to put into practice positive measures of health, and to make them eager to contribute their best from the standpoint of good citizens. These things can, and must, be done but it is going to require intelligent planning and the complete organization of all our resources and talents to achieve such a goal. In reviewing critically some of our past programs, we discover many weak points which should help us in our planning. It is time for a careful reappraisal of what we are doing, the purposes which we are serving, and a determination to strengthen any weak points which may be retarding progress in developing a strong, healthy and democratic-minded citizenship. Now as never before must our efforts be well directed. Any complacency or failure to recognize that we are up against formidable forces is likely to prove costly. *Determination* is one of the great qualities which lead to achievement. Combine that with *preparedness* and few things are impossible.

The very first step in our preparedness effort must be the achievement of optimal health, for as Surgeon General Parran has told us, "Our people's physical fitness, their freedom from preventable disease, their morale or mental stamina, will determine almost entirely the effectiveness of all other defense efforts." Therefore, public health work, of extreme importance in the easy days of peace, becomes one of the chief concerns of the nation. Health means strength and every patriotic American should feel it a duty to do anything he can to build physical fitness and to get corrected any remediable physical defects which he may have. While the strength of each individual alone may not be called upon to bear the burden of defense activities, increasing physical fitness to the fullest

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extent will help to strengthen the structure of the whole community and of the nation.

Any person who has not had a thorough physical examination lately by a competent physician should make a point of getting one without delay. Above all, everyone should be immunized against the diseases for which there is specific protection—especially typhoid fever, smallpox, diphtheria, etc. We know from long experience that war activities increase the incidence of communicable diseases. The mobilization and shifting of troops and the tremendous influx of new population into defense areas create an enormous public health problem. Therefore we must put to work every precautionary measure which modern science has proved effective in checking and controlling diseases, and leave nothing undone which will reduce preventable illnesses and disabilities.

Public health has had a dramatic history and, as we all know, has contributed greatly to mankind's comfort, safety and longevity. However, as we survey the road ahead and consider the present world crisis, we can readily see that public health is likely to play the most important role it has ever played in influencing both efficiency in fighting and in producing the equipment for fighting. Public health workers, who in the past have battled epidemics and many other menaces to health, are fully aware of the seriousness of the present crisis and the important contribution they can make to the total defense effort by helping to promote maximum physical fitness and protection against disease. No nation can profess strength whose people are handicapped by disease. Therefore, our part in the work ahead is to throw our full resources and training into the building of health to make possible a strong nation of both men and equipment. There is no time to lose. With better organization, more adequate knowledge and skill, and better trained personnel to execute this knowledge, public health commands a place of unparalleled importance today in developing the health and efficiency of our civilian and fighting forces.

Experience gained during World War I will help us to cope more efficiently with many phases of the present emergency and to avoid many mistakes. In fact, ironic as it may seem, tremendous impetus was given both medical and public health advances during the first war which tended to offset or compensate in some measure for the great loss of life and destruction of property suffered. This seems to bear out something the late Dr. Charles Mayo once said: "When the institutions, the freedom, the wealth, the health and the very lives of a people are jeopardized by destructive forces from without, the primal instinct of self-preservation becomes a spur to endeavor and accomplishment"—and war, tragic as it is, usually leaves some good in its wake. Therefore, instead of permitting the present conflict to bend us to its will, we must resolve to use it to forge for ourselves and those who come after us implements of service which will be enduring.

Already the war has brought about many changes and rapid adjustments have had to be made in the lives of everyone. There must be enormous sacrifices, to be sure, but at the same time we are reverting to the simpler ways of living, many superficialities are being discarded, and more and more we are coming down to earth again to relearn the values that count in living. This will have a wholesome effect, I believe, but a terrific cost must be paid for these lessons. Consequently, to make the most of them will require the very best that we can give in the way of education and sound direction.

Health education in the past has often failed to accomplish its purpose, partly through lack of planning and partly because it was begun too late. It is apparent that if ever we are to succeed in "health-conditioning" the general public, we must start with the child. Ideally, this conditioning should begin with the infant in the home, but such a beginning would presuppose a previous conditioning of the parents. Education of the parents should not be excluded from the program, but the most useful point at which to attack the cycle is the school child. And there is little question but that he can be reached best through his teachers. Hence the importance of having teachers who can accurately convey to these young people thorough and complete knowledge regarding health and disease.

Numerous surveys of the status of health knowledge among high school and college students indicate that they know much less about the fundamentals of healthful living, sanitation and disease prevention than they do about language, mathematics or history; in fact, many show widespread belief in erroneous, unscientific, and dangerous health practices. As these young people advance to positions of teaching, they carry with them their deficiency of health knowledge and thus deny to the succeeding generation an opportunity to acquire during the school years the basic facts regarding health conservation and disease prevention. Health is so vital a subject that most young students are eager to learn as much as they can about it. Consider how helpful it would be to maintain in the school library a section of late books and pamphlets suitable for student consumption wherein might be found most of the answers to inquiries relating to physiology, hygiene, sanitation and disease. Such a collection would be of real value in connection with certain courses of study. Because of the genuine need for a fresh, up-to-date "health" section in the school library, and because this section is often woefully neglected in most schools,

the Mississippi State Board of Health endeavors to supply upon request pamphlets and other literature on numerous health topics. When desired, the librarian or teacher may borrow for student or personal use books and periodicals from the State Board of Health Medical Library. The Library has a very nice collection of material suitable for lay consumption as well as advanced clinical texts and manuals for the medical and public health profession, and careful attention is given to the needs of the individual or group seeking information on the various phases of health. There is no question but that this unit of our organization is making an important contribution to health education. Its value in promoting community health cannot be overemphasized.

The kind of world we shall have tomorrow depends largely upon the training and examples which we give to the youth of today. The early years are the formative years—the foundation period, so to speak—when a sense of values is in the process of development. "To help each child attain the well-being needed to assume life's obligations willingly, to perform its duties efficiently, and to express the full joy of living" should be the first objective of every thinking group in America. It was three years ago this month that President Roosevelt told a conference which I attended, that "Democracy must inculcate in its children capacities for living and assure opportunities for the fulfillment of those capacities. The success of democratic institutions is measured, not by extent of territory, financial power, machines or armaments, but by the desires, the hopes, and the deeplying satisfactions of the individual men, women, and children who make up its citizenship."

Working cooperatively, the state and local education and health authorities in Mississippi, have made marked progress during recent years in developing measures designed to improve the health and well-being of our school children. Objectives are higher today than ever before, but there is still a tremendous gap between the new knowledge acquired on the health, growth and development of the child and the application of that knowledge.

We have come to realize that the valuable preventive services of the state health program can be most efficiently rendered through the personnel of the full-time county health department, rather than through the limited services of a part-time county unit. A majority of the population already have the advantage of such services in Mississippi and we were well on our way toward 100 per cent full-time county organization until the war came and made it necessary to give up much of this country's trained public health personnel for military duty. Public health workers are more than glad to make whatever sacrifices are necessary to win this war but it has been exceedingly difficult to try to do all the additional work imposed by the national defense program and hold the gains made to date, with our personnel being depleted almost daily. Nevertheless, employees have borne up loyally under the extra load and you will hear no complaining. Everyone is eager and willing to do all he or she can in the interest of national defense, and none are unmindful of the importance of helping to develop physical fitness in all citizens. For fitness is strength!

The lesson that public health gains from the startling discovery that such a large percentage of our young men are failing to qualify for military service because of physical or mental defects is that mere absence of disease does not imply that one is enjoying maximum physical efficiency and well-being. Consequently, the future will likely see greater emphasis than ever before on promotion and conservation of health as well as prevention of disease. It is time to begin applying on a universal scale the excellent store of knowledge we have been accumulating for some years for practicing personal preventive medicine and hygiene. That knowledge, properly recruited, will strengthen immeasurably the nation's defenses. It remains for health and education forces to assume the leadership in putting it to work. The task before us is truly a job for us all, and let us resolve to see it through and not relax our efforts until we have achieved the goals toward which we are working.

THE PENDULUM SWINGS FORWARD

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Again public opinion has attuned itself in readiness to catch any new and practical hints toward race advancement. Like some less desirable things, this trend toward constructive thinking and planning ahead has come with the whirlwind. It is the high school teacher's big opportunity to prepare these young people who are so soon to shape our post-war world. Necessity demands that they be given a forthright presentation of the social problems facing their world, and—luck be praised—it may now be done with the approval of our emergency-conscious public. Have you noticed how business men are willing to discuss changes which a few years ago would have shaken their sense of

security? Have you seen women answering calls made upon them and asking for more? "What can we do to help?"

Fortunately book publishers have paved the way for educators. They have long been experts in taking the public pulse and putting out material for which their readers were ready. In a survey of 23 new high school textbooks on science or social studies, we found that not one book ignored the population problem which faces our nation. All but one of the books, most of which were printed in or since 1940, offer suggestions of constructive measures to reverse the present trends in our birth rate; to prevent the proportionately rapid rate of increase among the least capable members of our society and to encourage larger families among the leader groups of the population. To present a cross-section of their direct and capable attack on the problem, quotations from all of them follow:

"The overtowering need of man today is for a slight increase in each generation of the average of hereditary intelligence and self-control. If this can be built up a little as generations go by, we can perhaps put civilization on a permanent and improving basis. If intelligence declines, another era of primitive agriculture and natural selection may await us or we may be pushed aside by a people that keeps its intelligence" (19).

Every one of the texts accepted the proven facts of heredity. "Because physical and mental fitness is important, much emphasis has been placed upon heredity. Its importance no one would deny" (2). "In the main, man derives his characteristics from his parents and grandparents" (22). "High-grade performance is not expected from scrub stock" (5). "Heredity makes marked differences in individuals" (8). "It has been proven that a part of such traits as feeblemindedness and insanity are inherited" (15). "Different individuals are made up on different recipes" (combinations of genes) "and different recipes give different results" (17). "We must conclude that the mental condition of parents is passed on to their offspring, through the genes, and that some laws of heredity apply to man as to other forms of life" (15).

The old argument of Nature vs. Nurture is scarcely conceded. With practically all modern authorities they are acknowledged to be inseparable, as for example, we have a "height potential" when born, but without adequate nurture, it would never be realized. "All traits are both environmental and hereditary, but genes represent the possibilities of the individual. They set a limit beyond which he cannot develop" (1). "It is known that a capacity for learning is as much of an hereditary quality as the color of eyes or skin" (2). "Euthenics goes hand in hand with Eugenics. Chromosomes tell the story in the main" (4). "Every child at birth inherits from its ancestors, immediate and remote, certain definite possibilities. Upon these environment plays" (9). "The genes represent the possibilities of the individual. He cannot exceed these possibilities, however favorable the environment" (1). "The best environment and most earnest of responses will come to nothing if the heritage is defective" (13).

War is the worst offender to a favorably selective birth-rate. "War is biologically unsound. It destroys the fit and leaves the unfit behind to propagate" (10). "Desirable as it is to prevent the hopelessly dull and unstable from having children, a vastly more important eugenic task is the prevention of war. War is totally dysgenic—destroying the best stock. It selects only the strong and intelligent and marks them for death. Those who escape death and disability, rarely escape with good health. The killed and disabled and their unborn children represent a terrific biological loss. The last world war did more to lower the quality of the white race than the efforts of eugenists can offset in the next 1,000 years" (13). "Positive eugenics acts slowly. There have been only about sixty generations since Christ" (6).

"War examinations give evidence that a substantial proportion of American people are of low intelligence" (23). "Tredgold (1914) placed the proportion of feeblemindedness in which inheritance plays a role, at 90%. His conclusions are the more significant, because he began his work with the belief that the major cases were due primarily to environmental conditions. On basis of recent work the percentage of such feeblemindedness is now placed nearer 50 than 90%" (23). The degree of intelligence which marks the line between feeblemindedness and normal persons has been defined as that degree below which the possessor cannot manage himself or his affairs with ordinary prudence (Goddard). "There are thirty-five normal for every feebleminded person" (4). "College people have 1.25 children per family, while our feebleminded are being allowed to propagate at a rate of 7.1 children per family" (10). "In animals the defective are eliminated by natural selection or by the breeder. In civilized society, we nurse and carry the undesirable along until we have an enormous population of feebleminded, criminal, shiftless and insane" (11). "Our country now has two million handicapped people to care for" (21). "So far as possible, all feebleminded, criminal and degenerate should be prevented from reproducing their kind" (12). "The only practical way to reduce feeblemindedness is to keep track of all cases and prevent propagation. This costly and elaborate program would reduce but not entirely eliminate the number of individuals who inherit the trait. In the long run it would, however, be worth far more than its cost in reducing accident, crime, immorality, and misery" (13).

"Until every nation recognizes the need of laws prohibiting unfit from producing offspring, our prisons, insane hospitals and other corrective instiutions will be overcrowded" (15). Recently, a slight furor was raised by those who claimed to have raised the intelligence of children by transplanting them to a more favorable environment. Even though we grant all their experiments, the fundamental fact of low ability holds as firmly as ever. "Defective children remained defective, dull children made gains, average children gained consistently but in lesser degree" (26). Their work is an encouragement to social workers, but entirely beside the problem of feeblemindedness.

"Not the least important, is the increased tax burden involved in the care of defective and dependent persons. During the last decade, sterilization laws have been passed in Britain, Canada, Denmark, Switzerland, Norway, Sweden, Finland, Mexico and Germany" (23). "The economic loss to our nation—through defectives is three billion dollars annually" (10). "The American Neurological Association, after extensive research, reports favorably on the idea of sterilization" (23).

The only way to improve the world is to improve man. "In six generations of the Bach family, there appeared 57 professional musicians, 29 really noted. The son of a great man has 500 times as good a chance of becoming noted as the son of an average man" (5). "Of 1394 descendants of the Jonathan Edwards family, 665 became prominent leaders. Not one became a criminal. Blood will tell" (4). "The possible qualities or talents that may be developed were determined long before birth" (16). If we deprive ourselves of leaders, the results are as predictable as sunrise. "In certain groups, the birthrate is declining while others are increasing or still maintain a high rate. If such trends exist and continue, they may in time change the nature and quality of a people." Figures show that the number of children per family increases as less of skill, judgment, responsibility and mental effort are required for the wage earner's job. The leaders of our nation have the fewest children. "Such facts indicate that these differential birth rates lead toward a lowering of the quality of the population. The conclusion is that the tendency in the U. S. is toward a gradual deterioration of the very qualities which have made civilization and which are most necessary in maintaining it. In general, the problem should be studied, research stimulated, and the conditions in our environment which cause this trend, should be corrected. Inquiring methods are needed in the social world as well as in the field of medicine and invention" (3).

These are aspects which need to be considered in a democracy such as ours. A study made by the Human Betterment Council in a California county states that we would have only half as many voters in our nation if we required a sixteen-year-old mental age of every one who was allowed to cast a ballot. "For the maintenance of the complex civilization on this continent, the apparent degeneration of human stock is even more immediately menacing than the waste of our natural resources. The laws of heredity show very clearly that the way to improve stock is to improve parents —to take advantage of heredity. Thus far, our medical science seems to have been chiefly occupied with saving human weaklings, who have propagated their kind. Civilization has also made the world 'safe for stupidity.' Every recent study of American birth rate points to the disappearance of the human stock in almost every group that is in leadership in our society. It is peculiarly ironical that while we breed our animals up, we breed ourselves down. Every thoughtful person can see that this civilization of interdependence is demanding a higher grade of intellectual ability, social vision, honor and constructive imagination. We need men and women big enough to use new powers. We can scarcely avoid the conclusion that the building up of character is as much the work of the scientist as of the preacher, teacher or philanthropist" (19).

One cannot study such an array of convincing data as science provides without feeling the call "To Arms"! "As the public becomes more conscious of the problem, more effective programs may be developed. The race of tomorrow is the product of the race of today. Some states have made beginnings in the control of reproduction of incompetents. These programs must be extended and we need to develop a social outlook which will make the rearing of healthy, sound-minded children an honor" (6). "Three methods have been proposed for the improvement of the human race, research, education, and legislation. That which is learned through research can be made the subject of legislation."

But before we are ready for legislation, we will need a long period of conscious education toward specific solutions of the problem. Under the pressures of the war, the problem may be neglected or it may be found essentially expedient to begin a scientific reduction of the definitely feebleminded, by preventing their birth. "Written across the pages of human achievement are the warning and the promise that man can control that which he has come to understand" (23). "To prevent the continued breeding of imperfect stock by sterilization and to stimulate the reproduction of the superior types, from *all* classes of people, would seem unquestionably desirable. For society to regulate marriage and sterilize the unfit is better than to keep our hands off until our knowledge on human inheritance is complete" (5).

"Humanity has come a long way. Behind is a stony, crooked path. How well the road, stretching ahead, will be paved depends, as always, on man himself. He is a captain of the race's destiny. Man lives not only in the present. We have the future in our hands in the control of heredity. We must "keep the stream pure."

The High School texts rightly omitted discussion of specific procedures in attacking the problem, but if youths face facts and learn the principle of cause and effect, they will be able to go to the polls with less prejudiced minds than our present generation shows. Through education, constructive legislation must reflect scientific research. Until people are ready for voluntary cooperation in eugenic progress, obviously laws would be futile. Through a privately supported experiment of twenty-eight years in California, the Human Betterment Foundation has demonstrated that great social gains and no losses can be had through a program of voluntary sterilization. Voices of protest arise over the basis and personnel of selection, over the advisability or means of an economic (financial) inducement to stimulate the birthrate of the right type of people in every class of society. But man has solved and must solve more difficult problems than this and there are extremely obvious defectives, at which point of beginning, agreement could be found. Education through schools, press, radio and discussion, can bring about the essential readiness and demand for action.

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SAFETY SLANTS ON SLATS

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Are you one of those re-creationists regularly seeking winter sport activity, coupled with vigorous conditioning? If so gather 'round you potential snow-bunnie, ski-heiler, she-ers, schussers, and what have you. I bring a challenging message for your shell-like ears, before you cover them up snugly in those fancy colored earmuffs. This is it—try skiing—Yes! I said SKIING. I promise that given just one day's trial, you will become a confirmed addict. The ski-bug will bite you just as it has done, and is doing, thousands of others.

Take my case for example. Until last winter, when the Navy sent me as Physical Fitness Officer to Dartmouth College, Hanover, N. H., my knowledge of skiing was limited to what I saw in the local press, newsreels, movies and rotogravure sections of the Sunday editions. But now, after a winter spent in the majestic hilly-slopes, I am sold

on this sport that is fast taking its place as one of America's most popular pastimes.

I am hardly one to advise on the best teaching methods used to develop a champion, but the point I would stress to all beginners is this, "You must creep before you can walk," so don't expect to be an expert right off. It is difficult to explain the first forlorn feeling of attempting to navigate on skis. To walk is rough enough, but to get up after a spill requires a technique of an acrobat plus the knowledge of a civil engineer. You most certainly will end up in some fancy positions and sustain a few scratches, abrasions and bruises with an occasional sound thumping tossed into the bargain. But keep your sense of humor, for if position is everything in life, you are set to learn much about that in one afternoon's lesson. At this stage of the game don't be of faint heart for, after actually braving beginners' hill for an extensive and exhausting workout with little regard for lack of ability or epidermis, the result will be more than gratifying.

After enjoying the learners' slope for awhile, with a combination of beginners' luck plus dormant agility you will soon negotiate the fairways and ground-loop with masterful style. Following this initial start snow-plowing and the herring-bone approach along with cristies and other stunts will become part of your repertoire. To accomplish such proficiency in the "BEND-Z-KNEEZ" art entails of pitched battle between skier and skis, so lend timely consideration to the following "safety slants on slats," or you will "wreckcreate" your plans for recreation.

1. Do not ski alone on either trails or slopes. A minor accident may result in a serious condition, if you're left exposed too long. Before running a new trail check the route especially for trips planned at night.

2. Do not attempt to run trails until you know how to stem, sidestep and have mastered elementary turns.

3. Always stop skiing when you feel tired. Ski under control. When you feel that you cannot regain control, stop!

4. Do not hesitate to take your skis off and carry them down an icy trail.

5. Keep to the side of the trail. Down hill runners always have the right-of-way.

6. When climbing, keep your eyes up the slope, and be alert, heeding instantly the cry of "track" by moving to the side of the trail.

7. Mark worn or dangerous spot for the benefit of yourself and the other "schussers" too. This caution is especially necessary at night when visibility is poorer than in daylight.

8. Try not to spoil the surface of the snow by walking on it when it is soft.

9. If you fall, fill in your "bathtub," for the "sitz-marks" created by your indentation will be a hazard to others.

10. When you fall, lie still in one spot until the others pass you. Do not try to dodge in between speeding skiers. The confusion may result in a "timber-jam."

11. Do not be a reckless runner. Skiing can be smooth and rhythmical if you'll only give it your attention and expend a he-man try; you too can roar down a steep hillside with grace and ease.

Why not join the ranks now? In sheer beauty alone clean, white slopes with a bright sun shining on them will be a productive paying panorama in sound vigorous health along with some real honest-to-God fun tossed in for good measure. In addition I'm sure the sport will kindle in you an interest in life out-of-doors, "warming" you up enthusiastically to the blessings of cold weather and the value of week-end jaunts to the white-blanketed hills.

Boy! My poles and sliding boards. I'll meet you in New Hampshire.

I THREW THEM IN THE WASTE BASKET

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The average person has a very high regard for his own opinion. He does not readily alter his line of thought or action even in the face of absolute proof that he is wrong. His mind is so set that he will not see the other fellow's point; or, if he does see, he will not admit it. This is particularly true if the discussion pertains to politics, religion, morals, educational policies, or any other subject on which a person may have preconceived ideas resulting from his environment. In short, our actions and ideas are controlled by emotions and habits more than they are by intellect. We see and do things the way we want to see and do them.

Although we may disagree with and "second guess" the authorities in any particular field, there are few of us who have the temerity to declare publicly that our knowledge and understanding is greater than theirs. Yet day by day, when we

reject the advice of established experience and do it our own way, our actions proclaim that we consider our own opinion to be the perfection of reliability.

To illustrate the point: The American Manufacturers Association—I think the name is correct—once published a booklet discussing the fact that the primary cause of dissatisfaction with home appliances and machinery was the customer's refusal to read or follow the directions for operating the device that are enclosed with each article purchased. A few weeks after reading this article I bought an electric ice cream freezer. Enclosed was a nice little folder of uninteresting directions. I glanced at the first page or two, then flipped it for the waste basket without so much as examining the last pages. Just as it left my finger tips, I thought of the American Manufacturers booklet. Here I was with absolutely no technical training indicating by my actions that I thought I knew more about the operation and maintenance of a machine than the engineers who designed it. I had made the human, and according to the American Manufacturers Association, the common mistake of rejecting the advice of authorities, accepting my own most limited experience as being more reliable.

This characteristic of rejecting sound advice based on experience is not limited to things of a mechanical nature. It is prevalent in all fields of human endeavor. The teacher is frequently guilty of this mistake in the classroom. Even though there is no accepted standard method of teaching there are certain basic principles to which we all give verbal acceptance. These directions for teaching represent the combined efforts of thousands of people who have spent millions of man-hours seeking the truth. Perhaps the most important information that has been brought to light is knowledge of the laws that control learning. In essence these may be stated as the law of readiness, the law of exercise, and the law of effect. They appear as common knowledge in numberless books on education and psychology. Failure to follow these basic directions results in inefficient operation of the educational machine. Any one who applies these laws in his class room is a good teacher!

Every teacher, at one time or another, in preparing for his life's work, has come in contact with these basic directions. Most of us recognize the fact that the laws of learning are valid—yet few of us make any effort to apply them. We prefer to teach our own way. More likely than not our method of teaching consists of copying the procedure of one or more of our former teachers; and in our copying we include all of the traits and characteristics which we recognize as being objectionable.

If at the close of the school year our Maker confronted us with the question, "What did you do with your directions for teaching?" how many of us would have to answer, "I threw them in the waste basket"?

WHAT DETERMINES THE POSSIBLE ENERGY OUTPUT OF AN INDIVIDUAL?

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To try to answer this question we must consider it from three points of view: (1) the sources of energy; (2) the manner of its consumption; and (3) the possible means of prolonging its effect on the human body.

We know that some of the possible sources of energy are from proteins, fats, and carbohydrates we eat and the oxygen we breathe. Which of these is the most important? Two Germans proved a long time ago that the nitrogen in proteins is not responsible for the production of energy in muscular contraction. They showed that the output of nitrogen in the urine of 24 hours was not appreciably increased by climbing the Faulhorn to a height of 1,956 meters.

Another German physiologist showed that the primary fuel of the muscle is carbohydrate and that if fat is used as a source of energy in muscular work, it must first be converted to carbohydrate somewhere else in the body. Data of a Yale physiologist indicate that at least 2/3 of the energy expended by most athletes is derived from fat.

Regarding the role of oxygen in the production of energy it may be said that it assists in converting the carbohydrates and fats into usable energy. When a substance is burned, the oxygen in the break-down unites the different elements to form simple chemical compounds. Thus carbohydrates unite with oxygen and form carbon dioxide and water. The living cells of tissues use oxygen by virtue of their metabolism. The amount of oxygen required in metabolism depends upon the chemical composition of the material that is being oxidized. A cell takes what it needs and leaves the rest. Activity creates a demand for oxygen. The utilization of oxygen provides the energy which "winds up the machine for a new run." In other words, when tissue is deprived of oxygen, there is an accumulation of lactic acid within it. When oxygen is again available the accumulated acid is removed

by an oxidative process. This deprivation also accounts for pain during or after exercise.

The heart is more subject to oxygen want than are the skeletal muscles of the body. The fatigue limit of the skeletal muscles is about .3% O_2 while that of the heart is only .07% O_2. The heart is, however, provided with a factor of safety. The coronary circulation which is a special circulatory system supplying the heart, has a much greater circulation than is the flow of blood in active skeletal muscle. Thus the heart is supplied so abundantly with oxygen that it can immediately reconvert about 3/4 of the lactic acid into glycogen and have on hand an excess as a factor of safety.

Chaveaus' Laws concerning the expenditure of energy should be fundamental in physical education and military work.

1. The expenditure of energy is in proportion to the muscular effort of contraction; to its duration and to the degree of contraction.
2. The expenditure of energy required to perform a given amount of work diminishes in proportion as the rapidity of the muscular contractions increases.
3. There is a *most* favorable effort and a *most* favorable speed for the performance of the maximum of work with the minimum of fatigue.
4. *Laws of rest:* A muscle returns more speedily to its condition of repose in proportion as its work has been more rapidly performed. (Just as the temperature of a body which has been heated falls at a rate proportional to the temperature to which it has been raised.)

When considering the relation between posture and the energy expended we find the following when 100 is considered the energy expended by a recumbent man. A seated man expends 107 units; standing in easy pose 110 units; standing in convenient pose 113 units, and in a normal or exaggerated pose 132 units. Improper posture often prevents organs, muscles and other kinds of tissues from receiving a proper supply of blood, and thus is deprived of the energy growing substances.

In a somewhat like manner alcohol is a poison that injures the muscles of the heart and the blood vessels. It causes more body heat to escape than the body can afford to lose. In the first stages of alcoholism excitability and overconfidence are present. In the second stage it affects the senses, and in the third stage it affects judgment and control. It restricts the amount of oxygen that the red corpuscles can absorb.

The energy produced during a day of 24 hours at various ages may be approximately the following:

10 yrs.—45 to 80 calories
20 yrs.—34 to 45 calories
30 yrs.—32 to 34 calories
40 yrs.—31 to 32 calories
50 yrs.—30 to 31 calories
60 yrs.—29 to 30 calories
70 yrs.—28 to 29 calories
80 yrs.—below 28 calories

About 600 calories of energy are required for sustained muscular effort. This amount of energy is equal to about one horsepower and is the approximate amount expended continuously by champion bicycle riders, long distance runners, experienced mountain climbers, and capable swimmers.

If in order to execute any physical action whatever, we make the strictly necessary movements, which alone are *useful* in executing it; if we eliminate the useless movements and regulate the *succession* of the useful, we shall effect a great saving both of time and fatigue. A timely example of the effectiveness of this rule is the bent knee walk used by some peddlers drawing heavily laden small carts. In this type of walking we diminish the oscillations of the bodily centre of gravity and increase the man's steadiness on his legs. This rule is also being observed to the extreme in the modern war plants where conservation of energy is so important.

The following are some interesting figures regarding some most efficient methods and exercises.

In *walking on a level surface* the most economic rate of progress is 2.8 miles per hour or 28 to 31 miles per day with 2-minute rests after every mile.

When carrying a burden, 2.6 miles per hour with a burden of 44 to 48.4 lbs.

For a *maximum daily performance* the load should be 99 lbs. and the pace 3 miles per hour with rests of 2 minutes every 650 yards.

The *average performance of an adult* between 25 and 40 years of age should be to carry a load of 99 lbs. for an average of 16 miles per day. If now the pace is increased to 3.4 miles per hour the distance will be reduced by almost half no matter how the intervals of rest be arranged.

The *proper conditions for a foot soldier are:* a load of not over 66 lbs. with a pace not over 3.1 miles per hour. Marking time expends 1/3 the energy of marching. Only 20% of the human energy is expended in actual work.

In *continuous exertion* (long distance runner) the body must maintain an approximate equilibrium between the processes of breakdown and recovery.

In *spasmodic exertion* (100-yard sprinter) the balance need not be maintained since the recharging of the muscles will be carried out during the rest period that follows:

An *excessively violent exercise* cannot be kept up because the lactic acid content of the muscles

quickly rises to the fatigue maximum which is about .28%. At this point a muscle is incapable of further effort. Muscular force regulates itself in accordance with the resistance encountered; it does not waste itself in vain.

Recent investigations show that the circulation and the heart can stand strain without harm if the person has been trained gradually to athletic work. In adolescence when the heart has not become accustomed to labor or when the heart has been weakened by some previous infection, this organ will be susceptible to injury from heavy athletics. Ten seconds of strenuous exercise requires more than an hour for recovery. Recovery is not complete in 24 hours. A sprinter cannot run daily in record time.

Physical training should therefore never call upon the total effort of the individual. Especially when prescribing exercises calculated to refresh the brain worker, it will select them from among the simplest.

The most potent virtue possessed by physical training is the fact that it teaches us to control our attitudes and adjust our movements and it trains our muscles, that is, it gives human energy full play and develops it to the utmost.

HUMISTON MOTOR ABILITY TEST AS ADMINISTERED TO UNIVERSITY SCHOOL GIRLS

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Problem

Dorothy Humiston has devised a motor ability test primarily designed for college women but which is applicable to secondary school girls. It is an inexpensive, easy to administer, reliable and valid test for measuring motor ability. My problem was to set up, administer the test, obtain scores, determine statistical measures and to correlate the test with McCloy's Classification Index. The information for the latter had already been obtained for the girls. I found that out of the one hundred and forty girls tested for motor ability, only one hundred and twenty-nine scores of the classification index were obtainable. The one hundred and forty girls are students of the University School, ranging from grades seven to twelve; they were very cooperative and interested in the test, except for a few instances. I received excellent cooperation from Miss Follick and the student leaders who aided in administering the test.

Findings

In the one hundred and forty cases there was a fairly normal distribution of scores as was shown in the frequency distribution chart and the frequency histogram. The best score obtained was thirty-six and six tenths seconds (36.6). The poorest score was sixty-eight seconds (68.0). The median was forty-six and twenty-seven one hundredths (46.27); the mode was forty-five and two tenths (45.2), in which there were six cases. The standard deviation for the total cases was five and ninety-seven one hundredths (5.97).

A correlation of minus fifty-eight ten thousandths (—.0058) was obtained from one hundred and twenty-nine cases between the Classification Index and Motor Ability test, which shows no correlation whatsoever. By dividing the C.I. scores into three groups of high 908-784, medium 783-745, and low 744-619, with forty-three cases in each group, I found only a slight difference in the averages of the motor ability test. The reliability of the difference was less than three, showing no reliability in the differences.

C.I. group	Average	Reliability of difference
I 908-784	47.458	I and II .017
II 783-745	47.437	I and III .588
III 744-619	46.679	II and III .578

Conclusions

The test itself can be used as a motivator for obtaining interest in Physical Education, and as a method of classifying the girls into groups for either class or extra curricular activities. The correlation with the Classification Index show that height, weight and age have no effect or influence on the girls motor ability; both methods measure something completely different and there is no relation between them. That also includes the method of grouping the C.I. into three units of high, medium and low and that as a separate group the motor abilities of those girls is not particularly different from those of other groups.

THE TRAINING, TEACHING LOAD, AND EXTRA CURRICULAR DUTIES OF MEN TEACHERS OF PHYSICAL EDUCATION IN ILLINOIS

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In a survey made several years ago, two types of information were secured from the teachers of physical education responding. The first was the duties of such teachers, the activities in the curriculum, and the sports coached by these persons,[1] and the second, statements concerning facilities and equipment, personal data, training, and self-evalution of that training.[2] This article is a discussion of one aspect of the survey not previously published, dealing with the relationship between preparation of men teachers of physical education, their teaching load, and their extra-curricular duties. The information was secured from five hundred and thirty-nine men teachers in four hundred and forty high schools in Illinois. A school enrollment of more than 150,000 pupils is represented.

Slightly more than half of these teachers were doing most of their teaching in their minor subjects in which they had sixteen hours of preparation, or less. The majority of these were in small schools (up to 250 pupils). Two hundred and seventeen (40%) admitted they were teaching subjects for which they were inadequately prepared, and seventy percent of these were also in small schools. Physical education was the subject of major specialization for only 34% while 22% of the balance had this as a minor.

The number of subjects taught by these instructors ranged from one (listed by thirteen teachers in large schools) to nine (one instructor in a school of 100 pupils) with a median of four subjects. Approximately one-fourth taught three subjects, and one-fifth, five subjects. Thirty percent taught in two different fields, while one-fourth taught either in one field, or in three. One person taught in six different fields, seven in five, and forty-two in four fields. Again small schools led in the number of instructors teaching in several fields.

As expected, the great majority were teaching only on the secondary level. However, twenty-nine reported two, and five, three levels. Most of these combinations included either junior and senior high schools, or senior high and elementary grades, although in several instances, these were combined with teaching in junior college. Surprisingly enough there was little difference between the various size schools, except that persons in small schools did not teach in junior colleges. The reason is obvious. Such institutions are usually not established in small towns.

These men carried a heavy load of teaching and coaching. On a time basis of one hour per class, and two hours per coaching period, the range was from fifteen hours per week to fifty-five (in a school of 400 pupils). It is certain that most of these teachers exceeded the forty-hour week, and many had longer hours, but the unusual fact is that in the two smallest groups (up to 100 students) the maximum was forty hours, and the median thirty-five! Teachers in the middle size schools "put in" the longest hours.

The heaviest teaching load was nearly always in the mornings, but thirty-one teachers indicated "evenings." There was no appreciable difference here between schools of different enrollments. Many teachers did not list study halls as a part of the load. Where they had such responsibilities, the average was five per week, with a maximum of twenty, in one instance. While teachers in the larger schools tended to have the fewest study halls, if they had any at all, eighteen in this group reported more than the average number.

Free time during the day, for the week, from Monday through Friday ranged from none (one hundred and twenty teachers or 22%), to twenty-two hours (two teachers in one small, and one medium sized school). It would appear that the men teachers of physical education were busy most of the time. Eighty-five percent of the teachers who responded did not engage in any organized evening activity, but approximately fifteen percent did. These included classes, or teaching (ten teachers) with the balance divided among scouting, refereeing, bowling, church work, lodge, and sponsorship of a variety of activities.

Eighty-eight (16%) of the men were responsible for noon-hour recreation, and one hundred and eighty-six (34%) handled intramurals. One hundred and thirty-two (25%) stated they taught physical education and coached only, while the rest all indicated a great variety of other duties,

[1] C. O. Jackson. "Activities Engaged in by Teachers of Physical Education in the High Schools of Illinois." Research Quarterly, 13:2 (May, 1942), pp. 242-251.

[2] C. O. Jackson. "Activities Engaged in by Teachers of Physical Education in the High Schools of Illinois. Part Two." Research Quarterly, 14:1 (March, 1943), pp. 60-81.

including teaching class room subjects. Most of those who taught physical education and coached were in the large high schools. Coaching or intramural duties required from four to twenty hours weekly. The largest number of instructors in all schools indicated ten hours as the usual time, exclusive of games. If game time were included it probably would add from three to six hours more each week during most of a season. One hundred and forty-three (27%), most of them in the large schools, also taught health education.

Two hundred and six reported "no credit" for physical education, with little difference apparent between enrollment groupings, while two hundred and twenty-five (41%), stated credit was awarded. One hundred and eight persons failed to answer this question. Only seven schools gave special credit for health, and five, for safety courses. Since the study was made, many schools have improved their programs, and now not only give credit toward graduation, but also require a third or a fourth year.

The majority of the men teachers in physical education in Illinois were not adequately prepared in this area at the time the study was made, and a large number of the others, had only minors or less in the field. Most of their teaching was in academic areas, and the summary indicates they were for the most part well-trained here in a variety of fields. There appears to be little correlation between the adequacy of training and the teaching load, or the extra curricular activities they engaged in. Two facts stand out. First, most teachers of physical education have a heavier teaching and coaching load, in a greater variety of subjects and activities than other teachers, and second, the training of many of these teachers is far below that expected and required by certification laws in other fields.

With the present shortage of coaches and teachers of physical education, due to transfers to the armed forces and to industry, the situation in Illinois, as well as in every other state, is even worse than this survey indicates. It is hoped that when some degree of normalcy returns, school boards and administrators, who determine the limits within which any program can operate, will insist on greater emphasis on physical education, to the end that more time and money will be allotted, and more adequate training of teachers required. With a new physical education law in the statutes, a new state director of physical education and a greatly expanded department, and a new superintendent of public instruction who is directly responsible for these advances, the future looks bright in Illinois.

COMPARATIVE TEST SCORES OF 50 TRACK AND FIELD CANDIDATES AND 50 ASTP STUDENTS ENROLLED IN THE REQUIRED PHYSICAL EDUCATION PROGRAM AT PURDUE UNIVERSITY

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and
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REASON FOR THE STUDY

About October 1, 1943, the authors were discussing the physical values of the regular physical conditioning program offered to the Military and Civilian students at Purdue University. During the course of the conversation, the question was raised as to whether or not the track and field activities engaged in by the candidates for the fall track and cross country teams would serve as effectively in conditioning the boys as would the regular program. As a result of this discussion, we decided to test the track and field candidates as well as the cross country runners, giving them the seven standard tests which are administered to the various ASTP groups throughout the country. It so happened that the end of the semester for the ASTP group came at approximately the same time as the end of the fall season, so that we felt that a comparison of the results would be fair at least from the standpoint of amount of time spent in conditioning work and conditions under which the tests were given.

PROCEDURE IN OBTAINING DATA

The last three days of fall practice were spent in giving the tests to 50 candidates. These included all types of men from sprinters to cross country runners to high jumpers, shot putters and other track and field events. The authors did the

timing and counting for the various events and we feel reasonably certain that the tests were administered as fairly as possible. These individual tests were then averaged, and the best performance in each test and also the worst performance in each test was recorded. Realizing that this group was probably quite specialized in its ability, we did not compare the results obtained with the average results of all the ASTP tests. Instead, we picked 50 cards from the files, all of which were in the upper bracket of performance. A survey of all the cards showed us that any ASTP student who scored above 500 points for the total test was exceptional; thus we feel that the cards from which we took our data represented in a sense a specialized group of ASTP students. These results were averaged and the best and worst performance listed for each event.

RESULTS

Army Test Comparisons
50 A. S. T. P. Men—50 Track and Field Men

Army	*300 yds.*	*100 yd. Pick-a-back*	*Sit-ups*	*Burpees*	*Squat Jumps*	*Push-ups*	*Pull-ups*
Best	36 sec.	18 sec.	50	16	75	45	17
Average	40.9 sec.	22.2 sec.	42	14	48	30	11
Worst	45.5 sec.	25 sec.	33	12	35	18	7
Track and Field							
Best	34.5 sec.	18 sec.	150	17	100	51	20
Average	37.8 sec.	21.5 sec.	69	13	62	30	13
Worst	42 sec.	25 sec.	32	10	25	17	7

COMMENTS ON RESULTS

As the above table shows, the best time for the 300 yard run was by a track and field man and was one and one-half (1½) seconds faster than the best time of any Army man. The worst time by any track and field man was three and one-half (3½) seconds better than the worst time of any Army man. The average shows that the track and field group was three and one-tenth (3.1) seconds better than the Army group. This is not particularly surprising since as we indicated before, this was a fairly specialized group of runners; however, there were many field event men and cross country men included in the group, and we would naturally expect them to be slower over the 300-yard distance than the ordinary runner.

The table shows that in the 100 yard Pick-a-back run, the fastest time in each group was eighteen (18) seconds and the slowest time 25 seconds; however, the track and field group averaged seven tenths (.7) of a second faster than the Army group. It is quite possible that the training given to the Army group gave them more practice in carrying a partner, but that the extra running done by the other group more than off-set this advantage.

The results of the sit-ups are overwhelmingly in favor of the track and field group. The best performance was 150 as against 50 for the Army group. While the worst performance of the Army group was 33 as against only 32 for the track and field group, the average of 69 for the track and field group compared to 42 for the Army shows a decided superiority for the track and field group in this event. We can assume only that running and field activities result in much better development of the abdominal and hip flexors than do the casual exercises performed in the average gymnastic class.

The Burpee test was the only one in which the Army group outscored the Track and Field group, although even in this test the best performance in the track and field group was one (1) better than the best performance in the Army group. However, the low score in the track and field group was ten (10) as compared with twelve (12) in the Army group. The Army average of fourteen (14) was one (1) better than the average of the track and field group. We have no definite explanation regarding this, but possibly the fact that the Army group indulged in a wider variety of activities during their regular periods might have made them slightly better coordinated in the performance of this test. We must also mention that the Army men administered the test to each other, and possibly did not check carefully to make sure that each performer came to an erect position every time he did one complete movement.

The Squat jump test again brings out a very definite superiority on the part of the track and field performers. The best result in the track and field group was twenty-five (25) better than the Army group. Although the worst performance in the track and field group was ten (10) below the worst performance in the Army group, the average of sixty-two (62) obtained by the track and field group is very superior to the forty-eight (48) obtained by the Army. We probably should expect

that runners' legs would be in better condition to stand this test than the legs of the average person.

The groups show the same average in the number of push-ups, with the track and field group having the best performance (51 against 45); also the worst performance (17 against 18). We feel however, that the result of this test is very favorable to the track and field group, since we do not ordinarily think of runners as developing the arm and shoulder muscles to any extent. Probably the shot putters, pole vaulters and discus throwers helped to raise the average of the track and field group in this test.

We were rather surprised at the results of the pull-up tests, since the best performance of the track and field event man was three (3) better than that of the Army group, and the worst performance of the track and field man was the same as the worst performance of the Army group. The track and field average of thirteen (13) was two (2) better than that of the Army group. Our feeling is that neither group spent any time practicing this event.

Summarizing the results: The track and field group had the best average in five of the seven tests; the Army group had the best average in one of the tests and the seventh was a tie. The track and field group had the best performance in six of the seven tests and tied on the seventh. The Army group had the worst performance in only one of the tests, tied in two others and was better than the track and field group in the remaining four. In other words, there was a greater range of performance in the track and field group, even though the average performance was in most cases better.

Conclusions and Recommendations

The authors realize that this small test does not permit any valid conclusions so far as making definite statements regarding the desirability of using track and field athletics for regular conditioning work. In order to really validate this short study, it would be necessary to pick a group of Army students and put them through a six-weeks conditioning course in track and field activities; then they should be tested and the results of that test compared with some previous test which this same group had taken as Army students. However, we do feel that the results of this study indicate that a group which likes to perform track and field athletics will work reasonably hard and develop reasonably well along all phases which the Army test indicates as being desirable. Thus we feel that any individuals in a gymnastic program who desire to leave that program and participate in a special sport should be permitted that opportunity if it does not interfere with his other military duties.

We will welcome comments, criticisms and constructive suggestions as to any further work we might do from time to time along these lines. Naturally, we are somewhat prejudiced in favor of track and field activities. On the other hand, we have tried to be fair in our comparisons and would like to see some other coaches conduct studies of a similar nature in their own fields.

Editor's note: At the editor's request the authors noted the average ages of these two groups. While the track men were younger (19 years, 9 months) than the A. S. T. P. students (21 years, 4 months) this one year, seven months difference could scarcely account for the differences in performance.

INDIANA PHYSICAL FITNESS TEST

THE TEST COMMITTEE
IRENE FOSTER, Bloomfield
HELEN HAZELTON, West Lafayette
KARL BOOKWALTER, Bloomington
FOREST WOOD, South Bend
FRANK STAFFORD, Chairman, Indianapolis

The Division of Health and Physical Education has received many requests for a simple, easy to administer, test for measuring physical fitness on the secondary school level. The above state committee was appointed for the purpose of preparing such a test. The test which follows was prepared and it is for the purpose of the measurement of achievement of secondary school pupils in the physical education programs. It is advisable that these tests be given at the beginning of the first semester, the beginning of the second semester and at the end of the second semester of each year. The score card provides space for a three-year record.

While this test is not proposed as a best test it is a valid ($r = .767$ with a criterion of 12 highly selected and varied items) modification of I. U. Motor Fitness Indices. Raw scores are utilized in the place of more desirable T-scores in order to

(Prepared under direction of Division of Health and Physical Education, 1098 West Michigan Street, Indianapolis, Indiana.)

reduce computations to a level which will make it possible for student leaders to assist in their calculation.

Norms are being established for each Classification Index group for boys and for each height-weight class division for girls. This latter classification utilizes the technique established by Frederick W. Cozens for college men and is necessitated by the fact that age-height-weight classifications are not related to successful performance in physical activities of high school girls and college women.

It is repeated that the primary use of this test should be for the determination of achievement in physical fitness rather than for classification purposes. The validity of the test was established with data on college men hence the actual validity for high school boys and girls is unknown. Evidence from other related studies give some indication that the validity in secondary schools might be even higher, at least for boys.

DIRECTIONS FOR ADMINISTERING THE TEST

The test can be given in one fifty-minute period to a large number of pupils (fifty or more). The class can be divided into two groups. One group can be given the *Straddle-Chins*, the *Squat-Thrust* and the *Push-Ups* en masse with partners scoring. The other group can do the *Vertical Jump* in squads of six to ten. The two groups of the class will then exchange places so that all get the *Straddle-Chins, Squat-Thrusts, Push-Ups* and the *Vertical Jumps*.

It is advisable to have the class practice the tests once using the same arrangement as that which will be used when the final test is given. This will prevent the loss of time and it will familiarize the pupils with the test items.

INDIANA PHYSICAL FITNESS TEST
SCORE CARD

Name_____ Male_____ Female_____ Grade_____

School_____ City_____ County_____

Class (sect)_____ Hour_____ Days per week_____

Encircle the classification group in which this individual falls.
See Test Direction Sheets for classification procedure.

Boys[1]	Up to 674	675-709	710-744	745-779	780-814	815-849	850-884	885-919	920 and up
Girls[2]	S S	S M	S H	M S	M M	M H	T S	T M	T H

Item No.	Event	Grade 10 Test Period (Date each period when testing)	Grade 11	Grade 12
1.	Age to last ½ year			
2.	Height (last full inch)			
3.	Weight in pounds			
4.	Classification Index[3]			
5.	Straddle-Chins			
6.	Squat-Thrust (20")			
7.	Push-Ups (floor)			
8.	Sum of scores on items 5, 6 and 7			
9.	Vertical Jump to last ½ inch			
10.	Ind. Phy. Fit. Score (item 8 times item 9)			
11.	Per cent of change (optional)			

[1] Classification of boys is determined by using Table I.
[2] Classification of girls is determined by using Table II.
[3] The classification index is determined by multiplying 20 times the age in years (to the nearest half year) plus 6 times the height in inches plus the weight in pounds. (Example: The index of a pupil who is 16 years old, 66 inches tall and weighs 121 pounds will be $20 \times 16 + 6 \times 66 + 121$ or 837, the pupil's Classification Index I.)

DIRECTIONS FOR RECORDING TEST RESULTS

The teacher should provide a copy of the Indiana Physical Fitness Score Card for each pupil. The card provides space for recording three tests per year for three years. It is very important that all directions be followed to assure statewide uniformity.

To determine the classification group for each pupil, Table I should be used for each boy and Table II should be used for each girl. It is important that this be determined for each pupil and computed and recorded on each pupil's score card. This score card should be filed so that future tests can be recorded, as given, to show the progress or lack of progress of each pupil. The per cent of change (Item 11 on score card) will indicate the changes that result.

RULES FOR PHYSICAL FITNESS TEST ITEMS

Straddle-Chins

Line the group according to size and count off by twos. Number ones lie on their back with arms sideward at shoulder level on the floor. The forearm is bent to the vertical. Number twos stand astride and facing Number ones, feet *outside* and *touching* elbows of ones. Partners then clasp hands, bent finger hold (use cleansing tissue to protect from long fingernails) and Number ones chin upward as often as possible. Chest should meet firm resistance with partner's thighs each time. Both partners keep legs and back straight. Arms of supporting partner are straight throughout. Partners exchange places and repeat.

Push-Ups (For Boys)

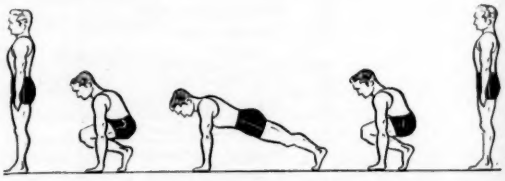
From a standing position place the hands on the floor and extend the legs backward, feet together, back and arms straight with weight supported on hands and toes only. This is the starting position. Lower the body by bending the arms until the chest touches the floor. Then raise the body to the starting position with arms straight. This counts as one push-up. The head, trunk and legs should remain in a straight line throughout the movement. The push-ups shall be done without rest in between.

Push-Ups (For Girls)

Pupil lies on the floor, face downward, knees bent to a right angle, hands on the floor under the shoulders and body straight from the knees to the shoulders. Push up to a position where the arms are straight. This counts as one push-up. Repeat as many times as possible without resting between push-ups. When lowering the body to the floor, touch only the chest to the floor. Do not bend hips or sway backwards. The push-ups shall be done without rest in between.

Squat-Thrusts (Burpee Test)

The pupils start from a standing position. Then come to a full squat, placing both hands upon the floor. This is followed by extending the legs backward, arms straight, coming to a front support. Return from this position to the full squat and then to the erect starting position. This completes the exercise. The pupil attempts to complete the exercise as many times as possible in a twenty-second period. The number completed is the score.



* Drawings by the courtesy of Brother Henry Lohse.

Vertical Jumps (Jump and Reach)

Pupil stands facing the wall, toes against same, feet flat on the floor. With a short piece of chalk in his hand, and with forearm and hand against the wall, pupil reaches as high up as he can and makes a short horizontal mark. Turning through a 90-degree angle with his side to the wall, the pupil now jumps as high into the air as possible, at the same time reaching up and making a second horizontal chalk mark. The vertical distance to the nearest half inch between top of reach mark and the top of the highest jump mark is recorded as the vertical jump. The best of three trials is recorded.

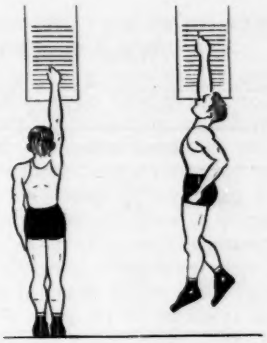


TABLE I

A TABLE FOR COMPUTING CLASSIFICATION INDEX I (20A + 6H) FOR BOYS*

The value obtained, then added to the weight, gives the Classification Index I

Height	Age in years and half years														
	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5	15	15.5	16	16.5	17
50	500	510	520	530	540	550	560	570	580	590	600	610	620	630	640
51	506	516	526	536	546	556	566	576	586	596	606	616	626	636	646
52	512	522	532	542	552	562	572	582	592	602	612	622	632	642	652
53	518	528	538	548	558	568	578	588	598	608	618	628	638	648	658
54	524	534	544	554	564	574	584	594	604	614	624	634	644	654	664
55	530	540	550	560	570	580	590	600	610	620	630	640	650	660	670
56	536	546	556	566	576	586	596	606	616	626	636	646	656	666	676
57	542	552	562	572	582	592	602	612	622	632	642	652	662	672	682
58	548	558	568	578	588	598	608	618	628	638	648	658	668	678	688
59	554	564	574	584	594	604	614	624	634	644	654	664	674	684	694
60	560	570	580	590	600	610	620	630	640	650	660	670	680	690	700
61	566	576	586	596	606	616	626	636	646	656	666	676	686	696	706
62	572	582	592	602	612	622	632	642	652	662	672	682	692	702	712
63	578	588	598	608	618	628	638	648	658	668	678	688	698	708	718
64	584	594	604	614	624	634	644	654	664	674	684	694	704	714	724
65	590	600	610	620	630	640	650	660	670	680	690	700	710	720	730
66	596	606	616	626	636	646	656	666	676	686	696	706	716	726	736
67	602	612	622	632	642	652	662	672	682	692	702	712	722	732	742
68	608	618	628	638	648	658	668	678	688	698	708	718	728	738	748
69	614	624	634	644	654	664	674	684	694	704	714	724	734	744	754
70	620	630	640	650	660	670	680	690	700	710	720	730	740	750	760
71	626	636	646	656	666	676	686	696	706	716	726	736	746	756	766
72	632	642	652	662	672	682	692	702	712	722	732	742	752	762	772
73	638	648	658	668	678	688	698	708	718	728	738	748	758	768	778
74	644	654	664	674	684	694	704	714	724	734	744	754	764	774	784
75	650	660	670	680	690	700	710	720	730	740	750	760	770	780	790
76	656	666	676	686	696	706	716	726	736	746	756	766	776	786	796
77	662	672	682	692	702	712	722	732	742	752	762	772	782	792	802
78	668	678	688	698	708	718	728	738	748	758	768	778	788	798	808

To use this table to compute Classification Index I, find the number *below* the age reckoned to the last half year, and to the *right* of the height taken at the last full inch, and add this to the weight (e. g. If the individual is 16 years and four months old, 66.7 inches tall and weighs 121 pounds, the result will be 716 + 121 = 837, which is his Classification Index I). All ages of 17 or more are calculated as for 17 years.

* *Measurement of Athletic Power*, C. H. McCloy, A. S. Barnes and Company, New York. 1932.

TABLE II

HEIGHT-WEIGHT CLASS DIVISIONS OF SECONDARY SCHOOL GIRLS*

	Height		Weight		
	Feet & Inches	Inches	Slender	Medium	Heavy
Short	4-7	55	up to 82	83-111	112 up
	4-8	56	up to 79	80-102	103 up
	4-9	57	up to 82	83-107	108 up
	4-10	58	up to 85	86-110	111 up
	4-11	59	up to 91	92-112	113 up
	5-0	60	up to 96	97-117	118 up
	5-1	61	up to 99	100-120	121 up
Medium	5-2	62	up to 103	104-124	125 up
	5-3	63	up to 106	107-127	128 up
	5-4	64	up to 110	111-132	133 up
Tall	5-5	65	up to 113	114-136	137 up
	5-6	66	up to 116	117-140	141 up
	5-7	67	up to 120	121-143	144 up
	5-8	68	up to 120	121-152	153 up
	5-9	69	up to 126	127-153	154 up
	5-10	70	up to 125	126-154	155 up
	5-11 up	71 up	up to 124	125-160	161 up

Direction: Read down the height column until the girl's height is reached. Next read to the right to the weight column containing the girl's weight for that height. Her classification is the height group and weight group combined. (Example: A girl whose height is 65 inches and whose weight is 137 is a Tall Heavy (TH).)

Code for Classification:

SS—Short Slender	MS—Medium Slender	TS—Tall Slender
SM—Short Medium	MM—Medium Medium	TM—Tall Medium
SH—Short Heavy	MH—Medium Heavy	TH—Tall Heavy

* Courtesy of C. Wesley Dane, Instructor, Indiana University. Done under the direction of Karl W. Bookwalter, Assistant Professor, Indiana University. Data (19,000 cases) furnished by Research Committee of the National Section on Women's Athletics, American Association for Health, Physical Education and Recreation.

GUIDANCE AND ADJUSTMENT IN THE SUMMER CAMP

NICHOLAS SCHREIBER

The University of Michigan Fresh Air Camp for Boys, is located on one of a chain of nine small lakes about 23 miles northwest of Ann Arbor, Michigan. It is unique in its inception, development and present purpose. The camp originated with a desire on the part of a number of University of Michigan students to provide an opportunity to under-privileged children from the crowded industrial areas of southeastern Michigan to enjoy the country atmosphere under the leadership of University of Michigan students. It was hoped and believed that adolescent boys would be inspired and elevated morally and spiritually through their associations with high minded young men. The boys were brought to camp for a period of one week in those early days over twenty years ago. They were fed plenty of wholesome food and were given a set program including swimming, athletics, nature study, crafts, campfire and spiritual activities. After this brief vacation in the fresh air, sunshine and woods they were delivered back to the environment from which they were brought.

The inadequacy of citizenship training, character and personality development under those conditions was recognized after several years. The length of stay in camp was gradually extended to four weeks and in many cases to eight. The leadership changed from volunteers, first to paid counselor and in more recent years to graduate students in the fields of education, sociology and psychology who devoted their time to counseling and graduate studies at the camp. The program evolved into one which tended more to serve the individual needs, interests and desires of the camper. The type of camper served also changed. The camper of earlier days was characterized by extreme poverty, malnourish-

ment and a slum environment. In the past decade normal boys between the approximate ages of eight and seventeen are the campers. They live at camp in small groups of six or eight to the counselor instead of fifteen to twenty as was the situation in the first years of the camp. These boys of recent years have experienced some difficulty in meeting problems of the home, school or community. They are selected by the school, social or case work agencies because they may profit from the type of program and the observation of qualified counselors and experts in the field of mental hygiene of adolescence and in group behavior. The agency which sends the boy supplies the camp with important personnel data including the following information: reasons for sending the boy to this camp, his home conditions, camper's adjustment to home, school, community, companions, and adults; his record of delinquencies and treatment, psychological data, present problem and record of treatment. Information relative to his behavior, achievements, adjustment, and abilities and interests is obtained from his parents and school. Prospective campers also fill out a questionnaire telling of their interests, skills, likes, dislikes, fears, experiences they hope to have at camp and other data which may help in the assignment of the boy to a cabin group and to understand him.

THE CAMP PHILOSOPHY

The camp experience is considered an important link in the life chain of the camper. It affords a natural happy situation free from the frustrations by circumstances which are beyond his control. Our experience has been that boys who have difficulty in adjustment to the complicated life of the city, school or home can generally make an adequate adjustment to camp life. Here the basic drives for recognition, affection, adventure, achievement and success, and for security are insured in a simple daily life.

We attempt to live in a cooperative community where the rights, privileges, and opinions of all are respected. This democratic way of life implies certain habits, attitudes and responsibilities. These we attempt to develop through our activity program. The development of character, mental and physical well-being, respect for the ability and toleration of the shortcomings of others, spiritual awakening, satisfactions and personal happiness are further aims of our program. In short the "good life" in camp resolves itself into a social process which involves continuous adjustment to group situations under the guidance and direction of competent leaders in an environment free of most of the factors causing maladjustment.

It would be presumptuous to state that we achieve, to a high degree, what is set forth. However the opportunity and the personnel is provided for the consummation of this aim.

We as adults may consider the experience of a month in camp as an integral link in the life chain of the camper in his training for citizenship, worthy home membership, personality development, character development, vocational and social adjustment, etc. We may be preparing him to work, live, play and take his place in a certain type of social order demanding certain types of responses. But most assuredly the camper does not consider his purpose in camp in the same light. We may think of the camp as an excellent laboratory for socialization, character development, toleration appreciation of democracy, inculcation of certain attitudes and ideals. Nevertheless, the most important single principle of which to be cognizant in shaping the camp program is the consideration of the desires and interests of the camper himself.

If any boy coming to camp were asked his reason for so doing, he would promptly reply, "to have some fun, learn to swim, be with my pals," or some other equally indicative statement denoting that his primary interests were joy, adventure, recognition, affection, security. Therefore the interests and fundamental urges of the camper are considered as essential to the activities program at the Fresh Air Camp. The camper's aim is enjoyment. He lives in the present and for the present with little thought of the future. The desired adult outcomes are possible in direct proportion to the extent to which the camper can be led to participate in the activities offered in a wholehearted and interest consuming manner.

METHODS EMPLOYED

We attempt to achieve our aim, not so much through a set program as through a group of leaders who understand and have confidence in our aims. The activity resolves itself into a medium through which the camper makes wholesome and worthwhile contacts with a counselor who has something worthwhile to offer and who is genuinely interested and concerned about the camper's welfare. The counselors are the leaders after whom we hope the campers will pattern their ideals, habits and attitudes. Any activity or interest, therefore, which brings and holds together these two parties long enough for an interchange of personalities is not only desirable but essential in the achievement of our fundamental purpose.

The counselor provides opportunities for group discussion and planning. He is ready with helpful suggestions. The counselor is effective only to the extent to which he is able to lead his group in the purposing, planning and initiating of activities. In this type of program the counselor must be skillful and resourceful.

PURPOSES OF THE CAMP

The camp has four purposes which may be explained briefly as follows: (1) As far as the camper is concerned, we are conducting a vacation camp. The month at camp serves the camper as an escape from an environment which in many cases has been the cause of his maladjustment. It is a chance to have fun, make new friends, be released from school routine, learn new skills; a chance to do the things that make him happy. (2) The camp serves the referral agencies, and the camper through these agencies, by submitting to them carefully compiled reports on each camper. These reports are based on observations of the camper by the counselor in his everyday activities. They are the result of continual observation in all camp situations by the counselor. The counselors are trained by the administrative and instructional staff in the necessary techniques of observation, recording and interpretation of behavior. The recommendations thus submitted serve as a basis for treatment of the camper upon his return to the home community. There is substantiating evidence that reports of observations obtained in a camp situation are infinitely more valuable than those obtained in an interview situation. (3) Another function of the camp is that of providing in-service training to teacher, social workers, and others. The graduate student has a unique opportunity to study causes of symptomatic behavior and, through living with the camper, to offer suggestions for treatment. This opportunity has proved to be a valuable experience to those folks who are interested in the adjustment of the individual boy to his environment. Techniques of observation and treatment of boys with personality, social, emotional, family, school, and other difficulties are learned in camp. The counselor is prepared through this experience, to carry back to his own work situation, a fund of knowledge and techniques for dealing with similar problems of adjustment which prevail in every community. (4) A natural outgrowth of this type of training is research in the social, psychological and educational problems presented in a camp situation.

RELATIONSHIP TO THE UNIVERSITY OF MICHIGAN

The counseling staff is made up of graduate students of the university. The student lives, studies and participates in the program at the camp. The program is organized in such a way as to give the students an understanding of the basic principles of adolescent development and behavior, and group adjustment, as well as practical experience in the observation, diagnosis and treatment of boys in the camp. The student devotes one-half of the summer to lectures, discussions and clinics with one or two days a week counseling. The other half of the summer is devoted to counseling activities which includes recording behavior and the writing of reports on the campers in his care. The courses offered are in the field of mental hygiene of adolescence and group behavior.

While election of courses at the camp must be in conformity to the official announcement, efforts are made to offer an integrated program of instruction. The program of instruction is in the nature of a work-conference organized around problems of adjustment in the camp. The students present their observations about the campers with whom they work, the problems met in the group work in the cabins, and opinions about what should be done to cope with these problems. After such presentation in the work-conference the instructors will give lectures and assignments related to an adequate understanding of the fundamental laws of individual growth and motivation, the basic mechanics of group behavior, character development, mental health and emotional stability. Special stress is placed upon the techniques of collection and interpretation of data derived from the camp situation. Thus the program of instruction is designed to be a work conference with the instructors providing expert guidance to the student on the problems confronted. An essential part of the program is the actual observation and counseling done by each student. Each student is assigned to a cabin group and assumes responsibility for a period of four weeks for a program of activities which will meet the needs and interests of his cabin group. In his activities as counselor to the cabin group, he works under the direction and guidance of one of the head counselors, responsible for one of the three divisions of the camp, each division of which consists of from four to eight cabins.

The work of the student counselor provides the center around which the work conference is organized. As a counselor the student makes the observations agreed upon in the conference, collects desired data, presents material at the clinic for consideration by the instructors responsible for the program of instruction, the camp physician, the mental hygienist and the head counselor. Thus the work of the student counselor becomes the focal point around which the theoretical and practical aspects of the program converge.

LEADERSHIP

(The December 30, 1917, issue of the "Daily Oklahoman" contained a reprint of the final instructions given to the student officers at the Second Training Camp at Fort Sheridan by Major C. A. Bach. It is an excellent composition on the subject of "Leadership," and it is applicable today.)

"In a short time each of you men will control the lives of a certain number of other men. You will have in your charge loyal but untrained citizens who look to you for instruction and guidance. Your word will be their law. Your most casual remark will be remembered. Your mannerisms will be aped. Your clothing, your carriage, your vocabulary, your manner of command will be imitated.

"When you join your organization, you will find there a willing body of men who ask from you nothing more than the qualities that will command their respect, their loyalty, and their obedience.

"They are perfectly ready and eager to follow you so long as you can convince them that you have these qualities. When the time comes that they are satisfied you do not possess them . . . your usefulness in that organization is at an end.

"Great results are not achieved by cold, passive, unresponsive soldiers. They don't go very far and they stop as soon as they can. Leadership not only demands but receives the willing, unhesitating, unfaltering obedience and loyalty of other men; and a devotion that will cause them, when the time comes, to follow their uncrowned king to hell and back again if necessary.

"Leadership is a composite of a number of qualities. Among the most important I would list self-confidence, moral ascendancy, self-sacrifice, paternalism, fairness, initiative, decision, dignity, and courage. Let me discuss these with you in detail.

"Self-confidence results first, from exact knowledge; second, the ability to impart that knowledge; and, third, the feeling of superiority over others that naturally follows. All these give the officer poise. To lead, you must know—you may bluff all your men some of the time, but you can't do it all the time. Men will not have confidence in an officer unless he knows his business, and he must know it from the ground up.

"There is no substitute for accurate knowledge. Become so well informed that men will hunt you up to ask questions; that your brother officers will say to one another, 'Ask Smith—he knows.' And not only should each officer know thoroughly the duties of his own grade but he should study those of the two grades next above him. A two-fold benefit attaches to this. He prepares himself for duties which may fall to his lot at any time during battle; he further gains a broader viewpoint which enables him to appreciate the necessity for the issuance of orders and join more intelligently in their execution.

"Not only must the officer know but he must be able to put what he knows into grammatical, interesting, forceful English. He must learn to stand on his feet and speak without embarrassment.

"You must have yourself so well in hand that, even though in battle you be scared stiff, you will never show fear. For if you, by so much as a hurried movement, or a trembling of the hands, or a change of expression, or a hasty order hastily revoked, indicate your mental condition, it will be reflected in your men in a far greater degree. In garrison or camp, many instances will arise to try your temper and wreck the sweetness of your disposition. If at such times you 'fly off the handle,' you have no business to be in charge of men. For men in anger say and do things that they almost invariably regret afterward.

"Another element in gaining moral ascendancy lies in the possession of enough physical vitality and endurance to withstand the hardships to which you and your men are subjected, and a dauntless spirit that enables you to not only accept them cheerfully but to minimize their magnitude.

"Moral force is the third element in gaining moral ascendancy. To exert moral force you must live clean, you must have sufficient brain power to see the right and the will to do right.

"Self-sacrifice is essential to leadership. You will give, give all the time. You will give of yourself physically for the longest hours, the hardest work and the greatest responsibility is the lot of the captain. He is the first man up in the morning and the last man in at night. He works while others sleep. You will give of yourself mentally, in sympathy and appreciation for the troubles of men in your charge. This one's mother has died, and that one has lost all his savings in a bank failure. They may desire help, but more than anything else, they desire sympathy.

"Don't make the mistake of turning such men down with the statement that you have troubles of your own, for every time you do, *you knock a stone out of the foundation of your house.* Your men are your foundation, and your house of leadership will tumble about your ears unless it rests securely upon them.

"When I say that paternalism is essential to leadership, I use the term in its better sense. I do not now refer to that form of paternalism which robs men of initiative, self-reliance, and

self-respect. I refer to the paternalism that manifests itself in a watchful care for the comfort and welfare of those in your charge. Soldiers are much like children. You must see that they have shelter, food, and clothing, the best that your utmost efforts can provide. You must be far more solicitous of their comfort than of your own. You must see that they have food to eat before you think of your own; that they have each as good a bed as can be provided before you consider where you will sleep. You must look after their health. You must conserve their strength by not demanding needless exertion or useless labor.

"And by doing all these things, you are breathing life into what would be otherwise a mere machine. You are creating a soul in your organization that will make the mass respond to you as though it were one man. And that is esprit.

"Fairness is another element without which leadership can neither be built up nor maintained. There must be first that fairness which treats all men justly. I do not say alike, for you cannot treat all men alike—that would be assuming that all men are cut from the same piece; that there is no such thing as individuality or a personal equation.

"Any reasonable order in an emergency is better than no order. The situation is there. Meet it. It is better to do something and do the wrong thing than to hesitate, hunt around for the right thing to do and wind up by doing nothing at all. And, having decided on a line of action, stick to it. Don't vacillate. Men have no confidence in an officer who doesn't know his own mind.

"Every time you change your orders without obvious reason, you weaken your authority and impair the confidence of your men. Have the moral courage to stand by your order and see it through.

"Moral courage further demands that you assume the responsibility for your own acts. If your subordinates have loyally carried out your orders and the movement you directed is a failure, the failure is yours, not theirs. Yours would have been the honor had it been successful. Take the blame if it results in disaster. Furthermore, you will need moral courage to determine the fate of those under you. You will frequently be called upon for recommendations for the promotion or demotion of officers and non-commissioned officers in your immediate command. Keep clearly in mind your personal integrity and the duty you owe your country. Do not let yourself be deflected from a strict sense of justice by feelings of personal friendship.

"I am taking it for granted that you have physical courage. I need not tell you how necessary that is. Courage is more than bravery. Bravery is fearlessness—the absence of fear. The merest dolt may be brave, because he lacks the mentality to appreciate his danger; he doesn't know enough to be afraid.

"Courage, however, is that firmness of spirit, that moral backbone, which, while fully appreciating the danger involved, nevertheless goes on with the undertaking. Bravery is physical; courage is mental and moral. You may be cold all over; your hands may tremble; your legs may quake; your knees be ready to give way—that is fear. If, nevertheless, you go forward; if, in spite of this physical defection you continue to lead your men against the enemy, you have courage. The physical manifestations of fear will pass away. You may never experience them but once. You must not give way to them.

"Use judgment in calling on your men for display of physical courage or bravery. *Don't ask any man to go where you would not go yourself.* If your common sense tells you that the place is too dangerous for you to venture into, then it is too dangerous for him. You know his life is as valuable to him as yours is to you.

"Occasionally some of your men must be exposed to danger which you cannot share. A message must be taken across a fire-swept zone. You call for volunteers. If your men know you and know that you are 'right,' you will never lack volunteers, for they will know your heart is in your work, that you are giving your country the best you have, that you would willingly carry the message yourself if you could. Your example and enthusiasm will have inspired them.

"And lastly, if you aspire to leadership, I would urge you to *study men.* Get under their skins and find out what is inside. Some men are quite different from what they appear to be on the surface. Determine the workings of their minds. You can study each to determine wherein lies his strength and his weakness; which men can be relied upon to the last gasp and which cannot.

"Know your men, know your business, know yourself."

(Reprinted in The Physical Educator and The Savage Alumni Bulletin with the kind permission of the American Council on Education, Washington, D. C., *War Service Opportunities,* March, 1943.)

BOOK REVIEWS

Bookwalter, Karl W., *Bulletin of the School of Education, Indiana University,* "Further Studies of Indiana University Motor Fitness Index," Vol. XIX, No. 5, September, 1943. (Indiana University Bookstore, Bloomington. pp. 48. 50 cents.)

The study proposes to simplify Motor Fitness Index, validate its use in administrative ability grouping, and set up achievement scales for various age-height-weight classes for college men.

Chinning, straddle chinning, and push-ups are used as force or strength items and vertical jump and standing broad jump are employed as velocity measures from which four motor fitness formulae are proposed. A twelve-item criterion produces validity coefficients of from .859 to .812 for the four indices. The use of straddle chinning in place of chinning is justified.

Motor Fitness Index II (chins plus push-ups) times standing broad jump is established as the best administrative ability grouping measure although all four indices are fairly satisfactory.

Achievement scales are established for seven Classification Index groups (McCloy) and for the nine height-weight class divisions (Cozens) for college men in each of the four indices. Approximately 2,000 cases were involved in the study.

KARL W. BOOKWALTER.

Cobb, Louise Staples (Ph. D.). *A Study of the Functions of Physical Education in Higher Education.* (N. Y.: Bur. Publ., Tchrs. Col., Columbia U., '43. Cont. to Ed., No. 876. pp. x, 176, bibliog. $1.85.)

There is confusion concerning the place of physical education in higher education, its requirement, its objectives; health, preparation for leisure, and character; its relation to military training. A distinct minority of institutions of higher learning accord the field its vital place. The author concludes that in institutions of higher learning physical education should contribute to the growth of the individual as an integrated personality by discovering the health, recreational, and personality needs of each student and helping him to meet these needs through the activity program.

Comment: A scholarly and broadminded analysis of the controversial issues encountered by the men's and women's programs of physical education in institutions of higher learning.

KARL W. BOOKWALTER.

Grout, Ruth E. (Federal Security Agency, U. S. Office of Education), Chmn: Physical Fitness Through Health Education, Victory Corps Series, Pamphlet No. 3, Washington: U. S. Government Printing Office, 1943. Pp. vii+98. 20 cents.

The committee which prepared this pamphlet was appointed by the U. S. Office of Education in collaboration with the U. S. Army, U. S. Navy, U. S. Public Health Service, and the Children's Bureau.

Six factors are considered as the general objectives of the program of Physical Fitness Through Health Education: namely: correction of remedial defects, prevention and control of disease, better nutrition, prevention of accidents, efficient daily routines, and sound mental attitudes.

A plan for administrative action toward these goals involves (a) fixing responsibility in one person, (b) providing time and opportunity for health education, (c) finding health needs and providing follow-up procedures, (d) providing school environment conducive to health, (e) training of personnel, and (f) community relations.

Defective teeth and vision are high in the causes for rejections from general military service. The common cold is the leading cause of school and work absenteeism. One survey revealed that only one-fourth of the families has a good diet. Accidents are the first cause of deaths among the 15-19 year olds. There is a need for wise use of leisure in exercise, recreation, rest, sleep, and relaxation. The teacher is an important element in imparting sound mental hygiene.

For each objective the problem is defined, a plan for action is outlined and a splendid selection of references provided. The book should be of much value to every health teacher.

KARL W. BOOKWALTER.

Health and Physical Education Department, Texas State College for Women. *A Syllabus of Conditioning Activities for Secondary School Girls and College Women.* (Mimeographed.) (Denton, Texas. 1943. pp. 85. $1.00 plus postage.)

This syllabus contains 55 selected exercises for conditioning girls and women. Each exercise is outlined as to purpose, starting position, description, comment, and accompaniment. Music is presented for the exercises, which are classified according to their essential contributions. Criteria for the selection and presentation of the exercises as well as definitions of fundamental positions are part of the syllabus.

KARL W. BOOKWALTER.

Miller, Ben; Bookwalter, Karl W.; Schlafer, George E. *Physical Fitness for Boys.* (A. S. Barnes & Co., New York, N. Y. 1943. $3.00.)

A source book for the modern intensified physical fitness programs for boys which may well be used

to vitalize peace time programs as well. Aims, objectives, activities, planned programs, methods, and references are minutely outlined and described.

The part of the total health and physical education program in making physical fitness teaching effective is emphasized. The need for adequate time, trained leadership, and adequate facilities is shown.

Policies and procedures are enumerated. Details for utilizing pupil leadership and planning the year's program day by day are given in detail. Examples of a complete list of administrative record forms are included.

Complete descriptions are given for athletic and group games, conditioning activities, combative activities, stunts and tumbling, swimming, wrestling, recreational activities, and fundamental tactics.

Carefully selected tests and measures are described completely, as are details of their administration. Methods of classification and marking are set up.

KARL W. BOOKWALTER.

Sharman, Jackson (Federal Security Administration, U. S. Office of Education), Chairman. *Handbook on Physical Fitness for Students in Colleges and Universities.* (Washington: U. S. Government Printing Office, 1943. pp. 140. 25 cents.)

A large and reputable committee has produced this handbook, for men and women of college age, which presents the role of physical fitness in colleges. The effect of time since Pearl Harbor in moderating the impact upon physical education appears to show its effect in the sanity of this publication. Objectives, activities, and methods essential to physical fitness are discussed for both men and women. Select references for each phase are available. Evidence of the importance of measurement is revealed in practical suggestions for both sexes. The necessity of integration with health service and health instruction is similarly evidenced.

Comment: A survey of sixteen physical fitness sources reveals this syllabus to be one of the better sources.

KARL W. BOOKWALTER.

FIFTEEN SELECTED SOURCEBOOKS ON PHYSICAL FITNESS

Air Training Corps of America, Inc., Physical Training for Airmen, (Elmon L. Vernier) New York. 1942

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